NPDES
INSPECTION REPORT

CITY OF COEUR D'ALENE, ID
WASTEWATER TREATMENT FACILITY

September 11, 2012

Prepared by:
David Domingo
NPDES Compliance Unit
Office of Compliance and Enforcement
Environmental Protection Agency, Region 10

Table of Contents

(Unless otherwise noted, all details in this inspection report were obtained from conversations with Mr. David Keil, Assistant Wastewater Utility Superintendent.)

I. Facility Information

Facility Name:	City of Coeur d'Alene, ID Wastewater Treatment Plant (Facility)
Facility Type:	Sewage Treatment Plant
Facility Location:	765 West Hubbard Avenue Coeur d'Alene, ID 83814 Latitude: +47.6822 Longitude: -116.7964
Mailing Address:	710 Mullan Avenue Coeur d'Alene, ID 83814
Facility Contacts:	Mr. David Keil, Assistant Superintendent
Facility Numbers:	Ph: (208) 457-3372 Fax: (208) 773-2505
Permit Number:	ID-002285-3
Permit Status:	The current permit became effective November 2, 1999, modified on May 13, 2004 and expired on November 2, 2004. The City of Coeur d'Alene (City) reapplied in April 2004 and the permit is administratively extended.
SIC Code:	4952

II. Inspection Information

Inspection Date/Time:	September 11, 2012	8:30 AM to 6:00 PM
Inspectors:	David Domingo (EPA)	
Weather:	Sunny	
Purpose:	Determination of compliance with the NPDES Permit and the Clean Water Act. The City's pretreatment and biosolids programs (Parts II and III, respectively of the Permit) were not evaluated during this inspection.	

III. Inspection Entry

This was an announced inspection. Mr. Keil was contacted the week prior to the September 11th inspection date.

I met Mr. Keil at the Facility at approximately 8:30 AM and Mr. Sid Frederickson, Wastewater Superintendent, joined us shortly afterwards.

I presented my credentials and discussed the purpose of the visit with Mr. Keil and Mr. Sid Fredrickson prior to the inspection. I was not denied access to the Facility.

I was accompanied throughout the inspection by Mr. Keil. Mr. Frederickson accompanied us during the tour of the Facility.

IV. Inspection Chronology

On September 11, 2012, the inspection began with an entry interview, followed by a file review and tour of the Facility which is located on the west side of the City at 765 West Hubbard Avenue (see Attachment A). The Facility tour included an inspection of the treatment units and a review of the sample collection and analytical procedures at the onsite laboratory. As part of the file review, the Facility's quality assurance plan (QAP), the operation and maintenance (O&M) manual and discharge monitoring reports (DMRs) were reviewed. There are several operators responsible for sample collection and onsite analysis. Mr. John Dearth, Laboratory/Pretreatment Supervisor, is responsible for filling out the DMRs and Mr. Keil is responsible for signing the DMRs.

The inspection then concluded with an exit interview with Mr. Keil where I pointed out the areas of concern I observed during the inspection.

V. Owner and Operator Information

The Facility is currently owned and operated by the City of Coeur d'Alene, Idaho.

VI. Background

The permit authorizes the Facility to discharge through outfall 001 to the Spokane River. Based on the revised April 2004 permit reapplication submitted by the City, the Facility receives wastewater from local residents and commercial establishments in the City of Coeur d'Alene (service population 35,000) and the Fernan Village (service population 180). The City has an EPA-approved pretreatment program and receives wastewater from two significant industrial users or SIUs (i.e. Deming Industries and Sunshine Minting). The 2004 reapplication also specified that the current Facility design flow is 6.0 million gallons per day (MGD) and the actual annual average daily flow is 3.160 MGD. The collection system is 100% separated sanitary sewer.

VII. Waste Management Process

The Facility is a mechanical treatment plant in which influent flows through the headworks where flow measurement and screening occur. The wastewater flows into the preaeration tank for grit removal and then to the primary clarifiers. From the clarifiers, the wastewater flows to the trickling filters, the solids contact tank, secondary clarifiers and then to the chlorine contact basins for disinfection. The effluent is dechlorinated using sulfur dioxide prior to discharge to the Spokane River through outfall 001. Sludge is dewatered using belt filter presses prior to transfer to the City's composting facility.

At the time of inspection, all treatments units were online. See Attachment B for photo documentation of the units.

VIII. Facility Sample Collection and Analyses

The sample collection and onsite analyses are conducted by several individuals including Mr. Dearth, Ms. Susan Whittier and Mr. David Hauser.

The parameters analyzed onsite using monitoring equipment include flow, pH, temperature, carbonaceous biochemical oxygen demand (CBOD), total suspended solids (TSS), total residual chlorine, total ammonia, phosphorus, fecal coliform and *Escherichia coli* (E. coli).

The other parameters listed in Part I.A of the Permit including cadmium, copper, lead, silver and zinc are analyzed by an outside laboratory (i.e. Anatek Labs, Inc., 504 E Sprague, Spokane, WA 99202 Ph: (509) 838-3999). Whole Effluent Toxicity testing is conducted by Analytical Laboratories, Inc., 1804 N. 33rd Street, Boise, ID 83201 Ph: (208) 342-5515.

See Attachment B for photo documentation of the City's QAP, certificate of analyses, standard operating procedures (SOPs) and laboratory benchsheets.

IX. Areas of Concern

This inspection included a review of the treatment system, the sample collection and analyses procedures, and documentation required by the Permit. During the course of this inspection, I observed and identified the following areas of concern:

A. Quality Assurance Plan (QAP) Part IV.A of the Permit specifies that the permittee shall develop a QAP for all monitoring requirements identified in the Permit. At a minimum, the QAP must include the following:

- Protocols for sampling techniques (field blanks, replicates, duplicates, control samples, etc.),

- Sample preservation methods,
- Sampling shipment procedures,
- Instrument calibration procedures and preventive maintenance (frequency, standard, spare parts),
- Qualification and training of personnel and
- Analytical test methods that achieve the method detection limits in Part I.B including quality control checks, quantification/detection levels.

In addition, the permittee must use the EPA approved quality assurance/quality control (QA/QC) and chain-of-custody procedures described in *EPA's Requirements for Quality Assurance Project Plans, EPA-QA/R-5* and *Guidance for Quality Assurance Project Plans, EPA QA/G-5*. At the time of the inspection, the following deficiencies were noted:

1) The QAP for Anatek Labs was developed for the City of Moscow, ID Brownfields Phase II Environmental Site Assessment. The QAP does not address the City of Coeur d'Alene's wastewater treatment facility.
2) The Facility's QAP specifies sample preservation temperature as 4°C. The temperature is not consistent with EPA approved methods which specify sample preservation temperature of $\leq$ 6°C but not frozen ($\leq$ 10°C but not frozen for fecal coliform and E. coli analysis).

At the time of inspection, the QAP did not include all the information specified in Part IV.A of the Permit.

B. Reporting of Monitoring Results Parts IV.D and VI.E of the Permit specify that the permittee must summarize monitoring results each month on the DMR and sign and certify that the DMRs are true, accurate and complete. At the time of the inspection, the July 2012 DMR was reviewed along with the corresponding analytical data (i.e., operator's daily log book, certificate of analysis…). The weekly average for CBOD, TSS and fecal coliform did not include all samples within the calendar week (i.e. last week of the month of July 2012). Consequently, the City failed to submit true, accurate and complete DMRs as specified in Parts IV.D and VI.E of the Permit.

C. Operation and Maintenance Part V.E.2 of the Permit specifies that the permittee shall ensure that the operation and maintenance (O&M) plan includes appropriate best management practices (BMPs) to prevent or minimize the potential release of pollutants to the Spokane River. The O&M plan shall be retained onsite and made available to EPA and Idaho Department of Environmental Quality (IDEQ) upon request. At the time of the inspection, the O&M plan was not available upon request, as specified in Part V.E.2 of the Permit. As a result, the information required to be in the plan could not be verified during the inspection.

D. Operation and Maintenance Part V.E.4 of the Permit specifies that the permittee shall compute an annual average flow entering the facility based on the previous twelve months data. If the average annual value exceeds 85% of the design criterion

(i.e. 6.0 MGD), the permittee shall develop a facility plan and schedule within one year from the date of the first exceedance. At the time of the inspection, the City was not calculating an annual average flow, as specified in Part V.E.4 of the Permit.

X. Additional Observations

A. Monitoring Procedures Part IV.C of the Permit specifies that monitoring must be conducted according to test procedures approved under federal regulations at 40 CFR Part 136 unless other test procedures have been specified in the permit. At the time of the inspection, the City's QAP referenced analytical methods from Standard Methods and not EPA methods. My concern is that the City must use EPA approved methods and not all Standard Methods may be EPA approved. In addition, the City must use methods that can achieve a method detection limit (MDL) equal to 0.1 times the effluent limit or the most sensitive EPA approved method, whichever is greater.

In addition, instruments in the onsite laboratory were serviced and calibrated by North West Instrument Services. The QAP should include the service provider's contact information as well as the frequency of service for the analytical and monitoring equipment at the Facility.

B. Quality Assurance Plan (QAP) At the time of the inspection, the City was revising the QAP. The May 2012 QAP reflects the 2007 draft permit. I pointed out to Mr. Keil, that permit conditions may change from the draft to the final permit and the City should make sure that the final QAP reflects the final permit. In addition, final permits recently issued to other wastewater treatment facilities do not require permittees to submit the QAP for EPA review and approval.

C. The July 2012 preprinted DMR does not include the NH_3 limits when effluent flow is > 4.2 MGD. In addition, the DMR specifies monitoring for silver when effluent flow is < 4.2 MGD between July 1 and September 30. The Permit does not include any flow conditions for silver during this time period.

D. Mr. Keil has received approval to submit reports using EPA's NetDMR.

E. Reporting of Monitoring Results Parts IV.D and VI.E of the Permit specify that the permittee must summarize monitoring results each month on the DMR and sign and certify that the DMRs are true, accurate and complete. At the time of the inspection, total residual chlorine (TRC) analysis was conducted three times per day and the City averaged the results within day. The City was reporting < 100 ug/l in accordance with Table 1 (Footnote 8) of the Permit. After the inspection, the NPDES Permits Unit was consulted and since the TRC limit is daily maximum and not instantaneous maximum the City is correctly averaging the individual results within the day and reporting the highest daily maximum on the DMR.

Also, at the time of the inspection, the effluent flow was used to calculate influent and effluent loadings. The City must ensure that the influent loading result reported on

the DMRs is true, accurate and complete as required in Parts IV.D and VI.E of the Permit.

XI. Inspection Sampling

Samples were not collected by EPA at the time of this inspection.

Report Completion Date: 12/5/12

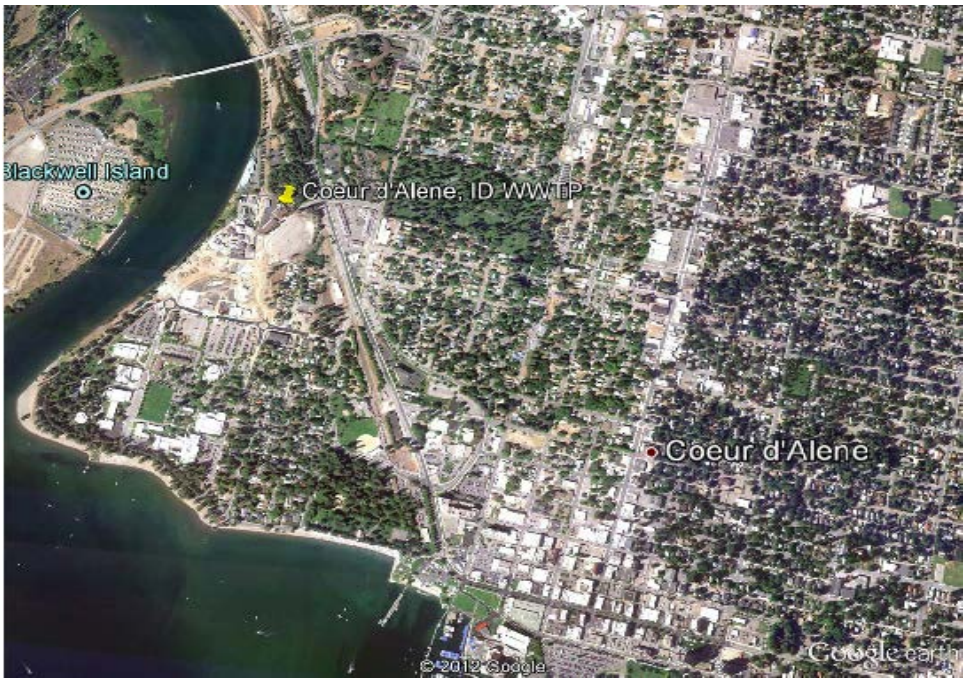
Lead Inspector Signature: David A Dumas

ATTACHMENT A

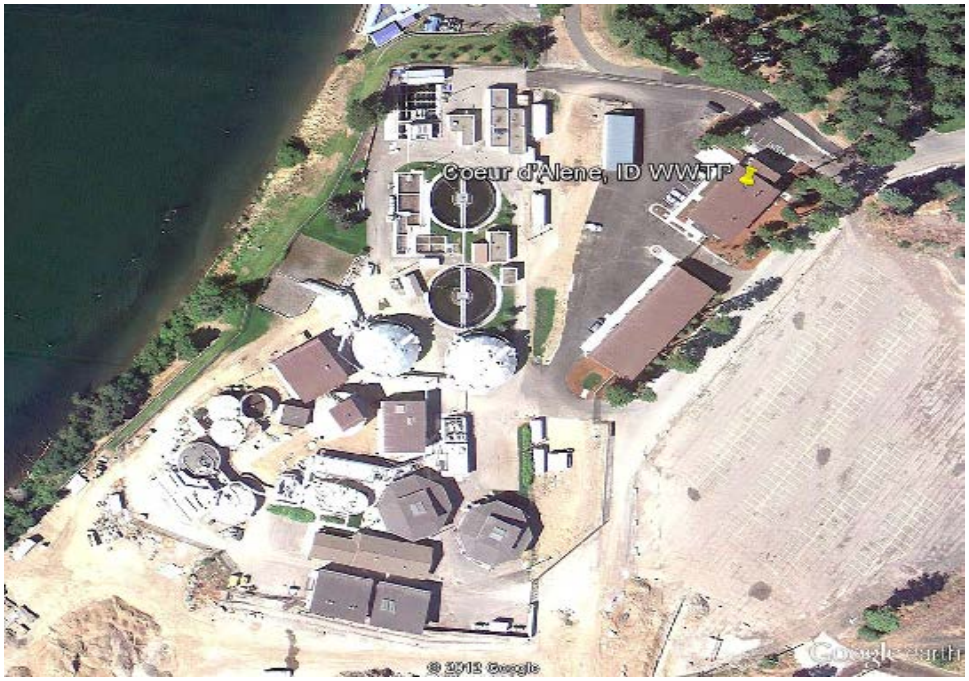
Aerial Photograph

City of Coeur d'Alene, Idaho
Wastewater Treatment Facility

(September 11, 2012 Inspection)



Aerial photograph of the City of Coeur d'Alene, ID wastewater treatment plant. Facility is located on the west side of the city and discharges effluent to the Spokane River.



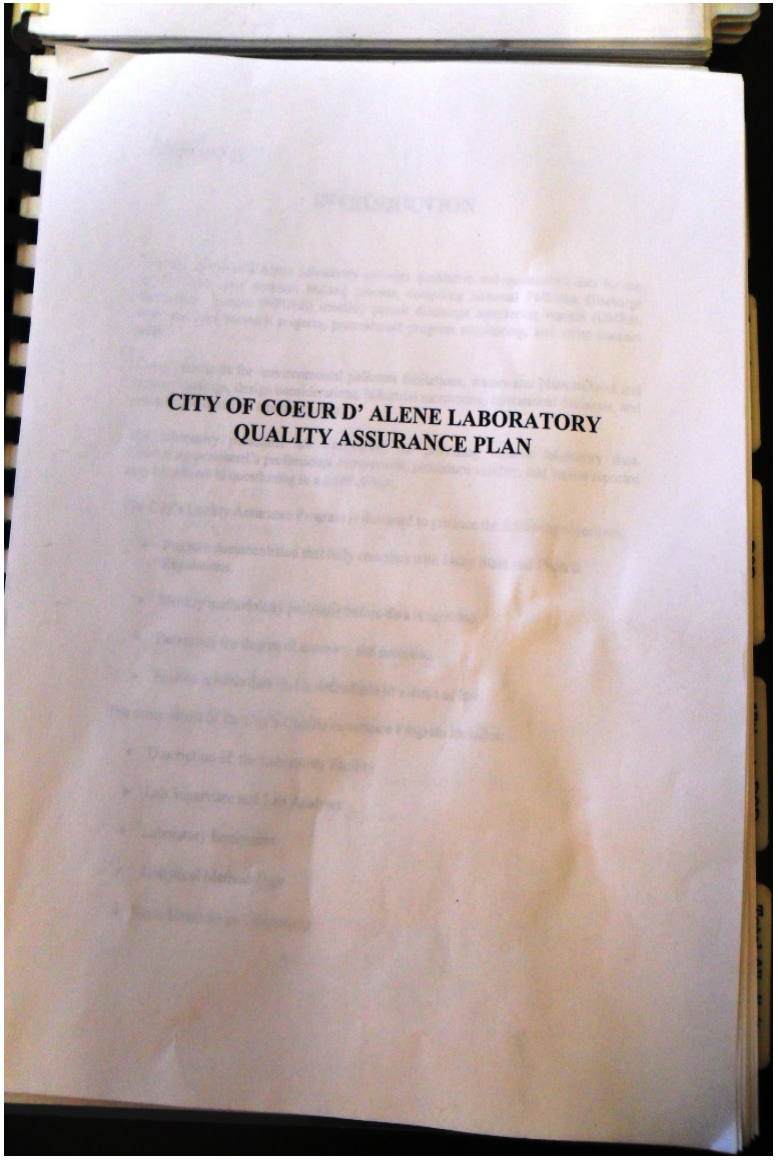
Aerial photograph of the City of Coeur d'Alene, ID wastewater treatment plant. Facility is located on the west side of the city and discharges effluent to the Spokane River.

ATTACHMENT B

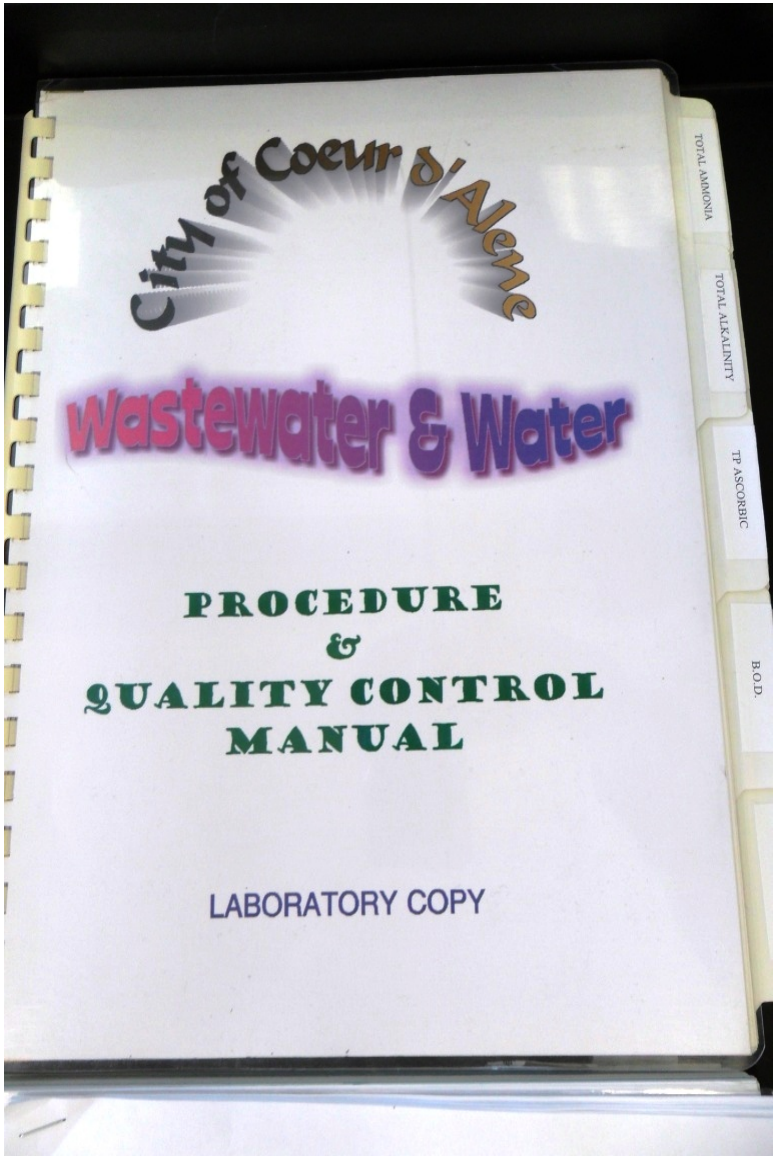
Photograph Documentation

City of Coeur d'Alene, Idaho
Wastewater Treatment Facility

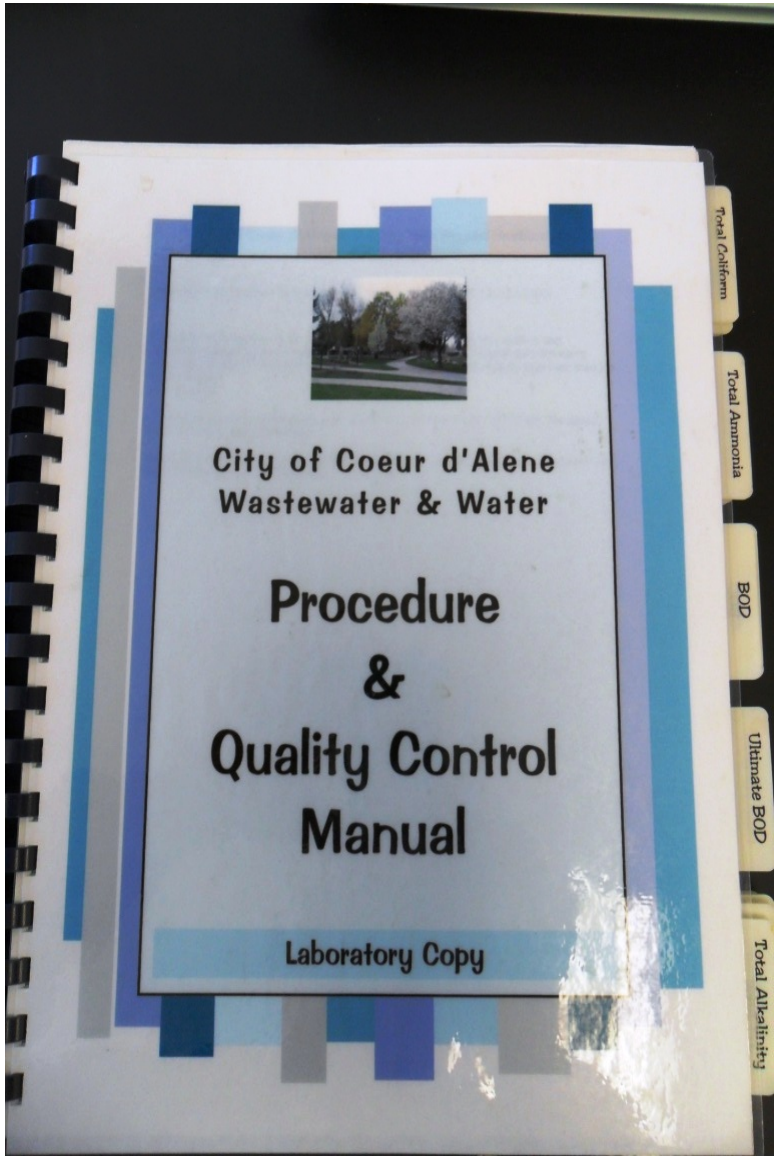
(September 11, 2012 Inspection)



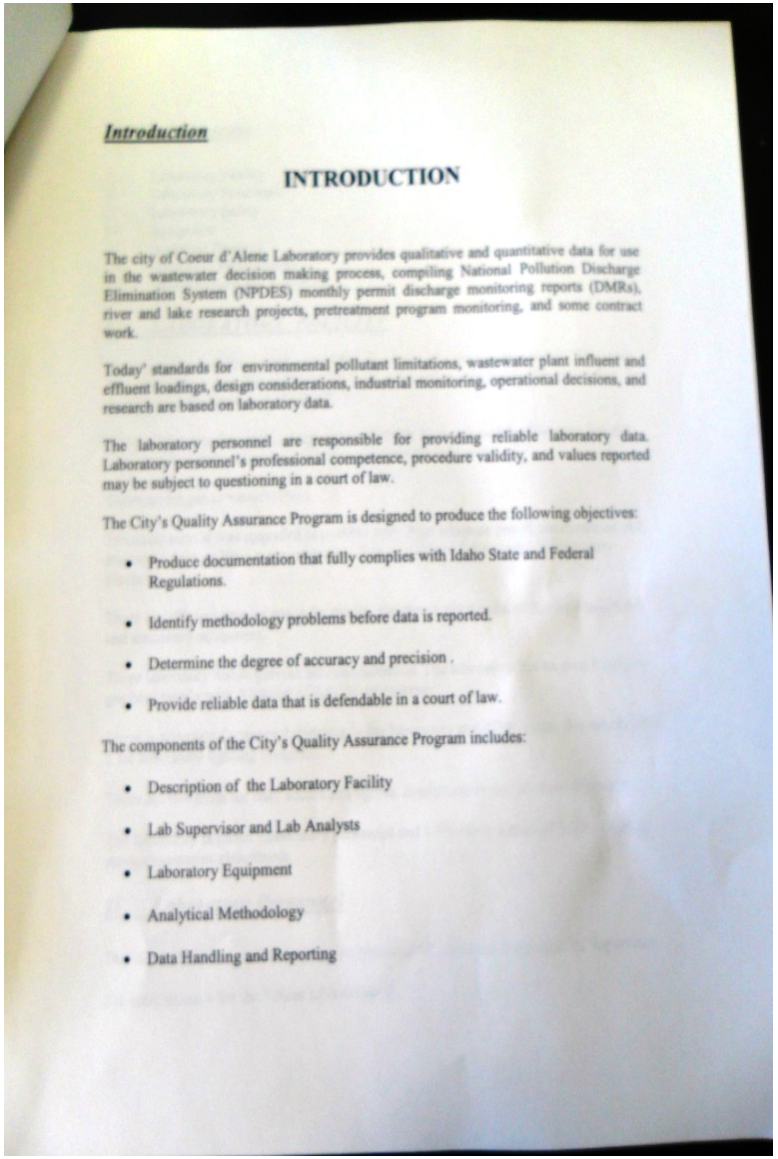
Photograph by David Domingo (EPA) on September 11, 2012 looking at the QAP for the onsite laboratory.



Photograph by David Domingo (EPA) on September 11, 2012 looking at one of the Procedure and Quality Control Manuals for the onsite laboratory.



Photograph by David Domingo (EPA) on September 11, 2012 looking at one of the Procedure and Quality Control Manuals for the onsite laboratory.



Introduction

INTRODUCTION

The city of Coeur d'Alene Laboratory provides qualitative and quantitative data for use in the wastewater decision making process, compiling National Pollution Discharge Elimination System (NPDES) monthly permit discharge monitoring reports (DMRs), river and lake research projects, pretreatment program monitoring, and some contract work.

Today' standards for environmental pollutant limitations, wastewater plant influent and effluent loadings, design considerations, industrial monitoring, operational decisions, and research are based on laboratory data.

The laboratory personnel are responsible for providing reliable laboratory data. Laboratory personnel's professional competence, procedure validity, and values reported may be subject to questioning in a court of law.

The City's Quality Assurance Program is designed to produce the following objectives:

- Produce documentation that fully complies with Idaho State and Federal Regulations.
- Identify methodology problems before data is reported.
- Determine the degree of accuracy and precision .
- Provide reliable data that is defendable in a court of law.

The components of the City's Quality Assurance Program includes:

- Description of the Laboratory Facility
- Lab Supervisor and Lab Analysts
- Laboratory Equipment
- Analytical Methodology
- Data Handling and Reporting

Photograph by David Domingo (EPA) on September 11, 2012 looking at one of the Procedure and Quality Control Manuals for the onsite laboratory.

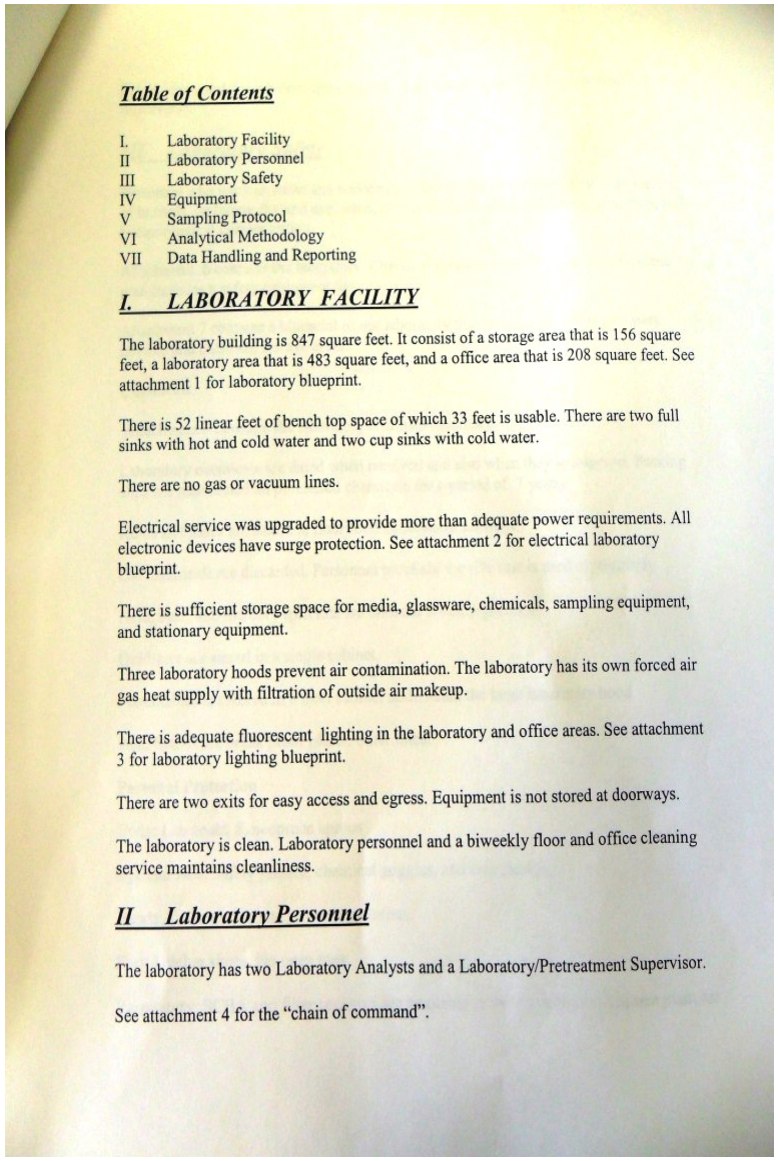


Table of Contents

I. LABORATORY FACILITY

The laboratory building is 847 square feet. It consist of a storage area that is 156 square feet, a laboratory area that is 483 square feet, and a office area that is 208 square feet. See attachment 1 for laboratory blueprint.

There is 52 linear feet of bench top space of which 33 feet is usable. There are two full sinks with hot and cold water and two cup sinks with cold water.

There are no gas or vacuum lines.

Electrical service was upgraded to provide more than adequate power requirements. All electronic devices have surge protection. See attachment 2 for electrical laboratory blueprint.

There is sufficient storage space for media, glassware, chemicals, sampling equipment, and stationary equipment.

Three laboratory hoods prevent air contamination. The laboratory has its own forced air gas heat supply with filtration of outside air makeup.

There is adequate fluorescent lighting in the laboratory and office areas. See attachment 3 for laboratory lighting blueprint.

There are two exits for easy access and egress. Equipment is not stored at doorways.

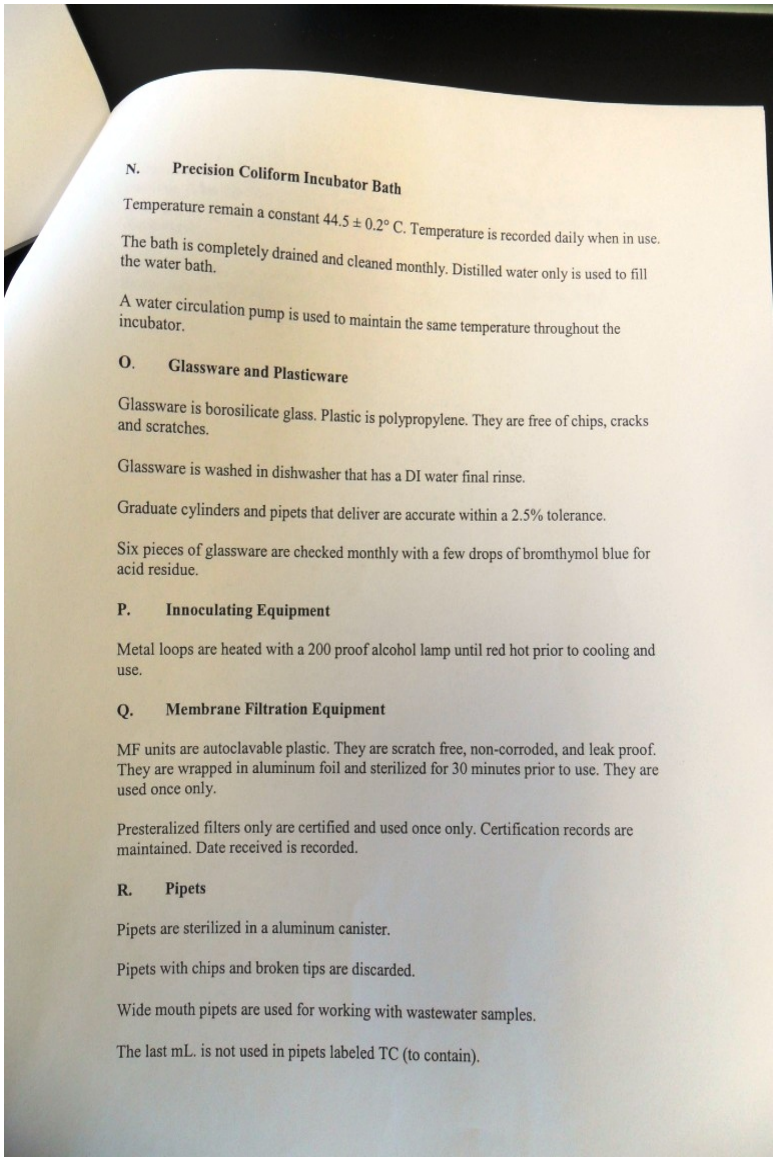
The laboratory is clean. Laboratory personnel and a biweekly floor and office cleaning service maintains cleanliness.

II Laboratory Personnel

The laboratory has two Laboratory Analysts and a Laboratory/Pretreatment Supervisor.

See attachment 4 for the "chain of command".

Photograph by David Domingo (EPA) on September 11, 2012 looking at one of the Procedure and Quality Control Manuals for the onsite laboratory.



N. Precision Coliform Incubator Bath

Temperature remain a constant 44.5 ± 0.2° C. Temperature is recorded daily when in use.

The bath is completely drained and cleaned monthly. Distilled water only is used to fill the water bath.

A water circulation pump is used to maintain the same temperature throughout the incubator.

O. Glassware and Plasticware

Glassware is borosilicate glass. Plastic is polypropylene. They are free of chips, cracks and scratches.

Glassware is washed in dishwasher that has a DI water final rinse.

Graduate cylinders and pipets that deliver are accurate within a 2.5% tolerance.

Six pieces of glassware are checked monthly with a few drops of bromthymol blue for acid residue.

P. Innoculating Equipment

Metal loops are heated with a 200 proof alcohol lamp until red hot prior to cooling and use.

Q. Membrane Filtration Equipment

MF units are autoclavable plastic. They are scratch free, non-corroded, and leak proof. They are wrapped in aluminum foil and sterilized for 30 minutes prior to use. They are used once only.

Presteralized filters only are certified and used once only. Certification records are maintained. Date received is recorded.

R. Pipets

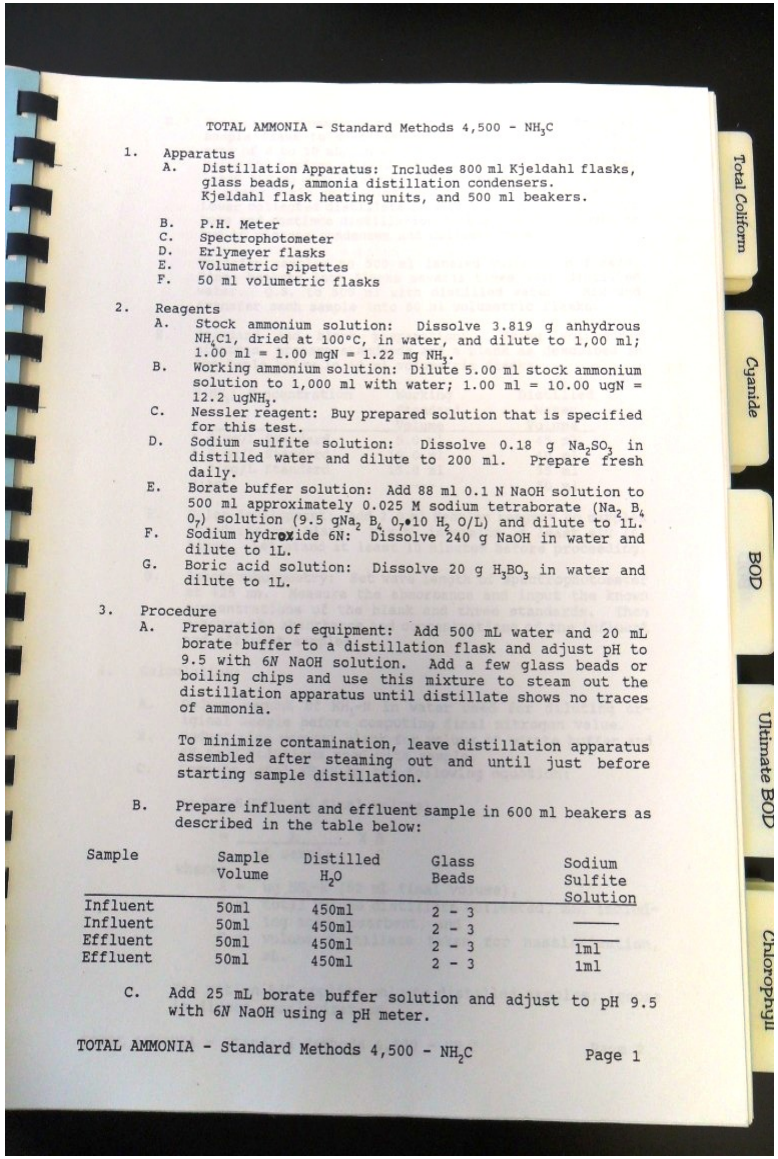
Pipets are sterilized in a aluminum canister.

Pipets with chips and broken tips are discarded.

Wide mouth pipets are used for working with wastewater samples.

The last mL. is not used in pipets labeled TC (to contain).

Photograph by David Domingo (EPA) on September 11, 2012 looking at one of the Procedure and Quality Control Manuals for the onsite laboratory.



TOTAL AMMONIA - Standard Methods 4,500 - NH_3C

1. Apparatus
   - A. Distillation Apparatus: Includes 800 ml Kjeldahl flasks, glass beads, ammonia distillation condensers. Kjeldahl flask heating units, and 500 ml beakers.
   - B. P.H. Meter
   - C. Spectrophotometer
   - D. Erlymeyer flasks
   - E. Volumetric pipettes
   - F. 50 ml volumetric flasks

2. Reagents
   - A. Stock ammonium solution: Dissolve 3.819 g anhydrous NH_4Cl, dried at 100°C, in water, and dilute to 1,00 ml; 1.00 ml = 1.00 mgN = 1.22 mg NH_3.
   - B. Working ammonium solution: Dilute 5.00 ml stock ammonium solution to 1,000 ml with water; 1.00 ml = 10.00 ugN = 12.2 ugNH_3.
   - C. Nessler reagent: Buy prepared solution that is specified for this test.
   - D. Sodium sulfite solution: Dissolve 0.18 g Na_2SO_3 in distilled water and dilute to 200 ml. Prepare fresh daily.
   - E. Borate buffer solution: Add 88 ml 0.1 N NaOH solution to 500 ml approximately 0.025 M sodium tetraborate ($Na_2B_4O_7$) solution (9.5 g$Na_2B_4O_7$•10 H_2O/L) and dilute to 1L.
   - F. Sodium hydroxide 6N: Dissolve 240 g NaOH in water and dilute to 1L.
   - G. Boric acid solution: Dissolve 20 g H_3BO_3 in water and dilute to 1L.

3. Procedure
   - A. Preparation of equipment: Add 500 mL water and 20 mL borate buffer to a distillation flask and adjust pH to 9.5 with *6N* NaOH solution. Add a few glass beads or boiling chips and use this mixture to steam out the distillation apparatus until distillate shows no traces of ammonia.

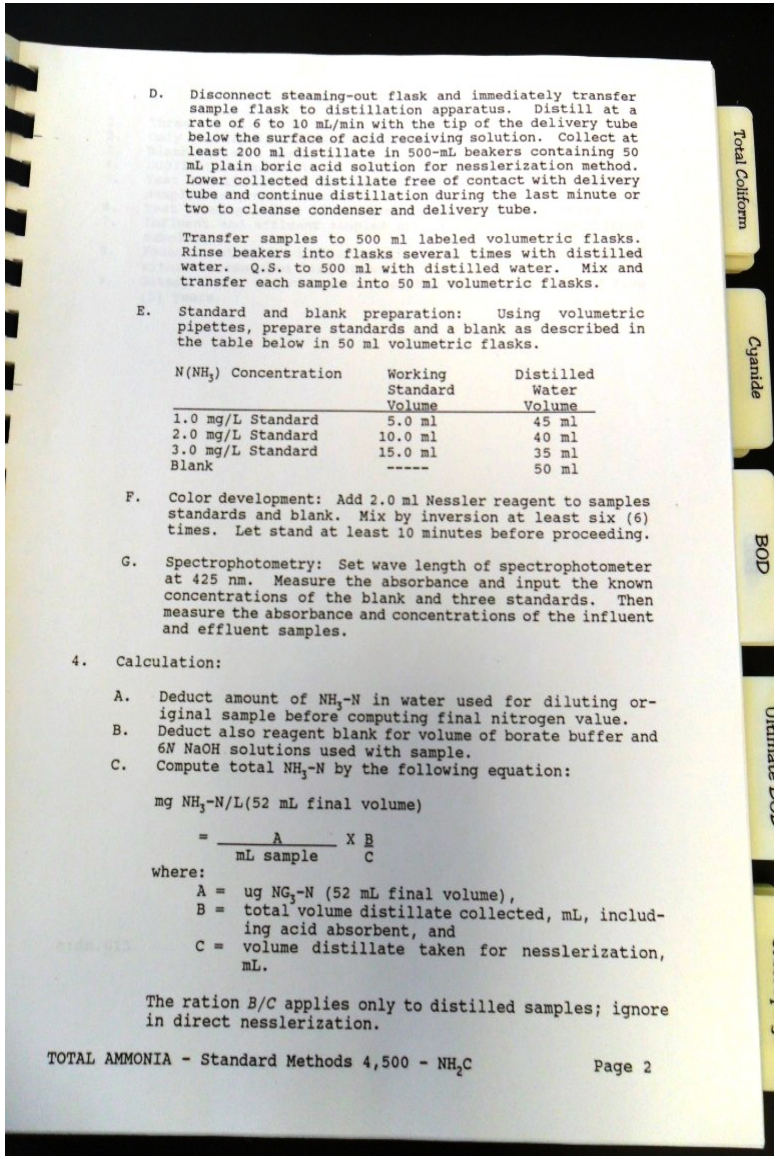
     To minimize contamination, leave distillation apparatus assembled after steaming out and until just before starting sample distillation.

   - B. Prepare influent and effluent sample in 600 ml beakers as described in the table below:

Sample	Sample Volume	Distilled H_2O	Glass Beads	Sodium Sulfite Solution
Influent	50ml	450ml	2 - 3	———
Influent	50ml	450ml	2 - 3	———
Effluent	50ml	450ml	2 - 3	1ml
Effluent	50ml	450ml	2 - 3	1ml

   - C. Add 25 mL borate buffer solution and adjust to pH 9.5 with *6N* NaOH using a pH meter.

Photograph by David Domingo (EPA) on September 11, 2012 looking at standard procedures for total ammonia analysis. Note the reference to Standard Methods number.



D. Disconnect steaming-out flask and immediately transfer sample flask to distillation apparatus. Distill at a rate of 6 to 10 mL/min with the tip of the delivery tube below the surface of acid receiving solution. Collect at least 200 ml distillate in 500-mL beakers containing 50 mL plain boric acid solution for nesslerization method. Lower collected distillate free of contact with delivery tube and continue distillation during the last minute or two to cleanse condenser and delivery tube.

Transfer samples to 500 ml labeled volumetric flasks. Rinse beakers into flasks several times with distilled water. Q.S. to 500 ml with distilled water. Mix and transfer each sample into 50 ml volumetric flasks.

E. Standard and blank preparation: Using volumetric pipettes, prepare standards and a blank as described in the table below in 50 ml volumetric flasks.

$N(NH_3)$ Concentration	Working Standard Volume	Distilled Water Volume
1.0 mg/L Standard	5.0 ml	45 ml
2.0 mg/L Standard	10.0 ml	40 ml
3.0 mg/L Standard	15.0 ml	35 ml
Blank	-----	50 ml

F. Color development: Add 2.0 ml Nessler reagent to samples standards and blank. Mix by inversion at least six (6) times. Let stand at least 10 minutes before proceeding.

G. Spectrophotometry: Set wave length of spectrophotometer at 425 nm. Measure the absorbance and input the known concentrations of the blank and three standards. Then measure the absorbance and concentrations of the influent and effluent samples.

4. Calculation:

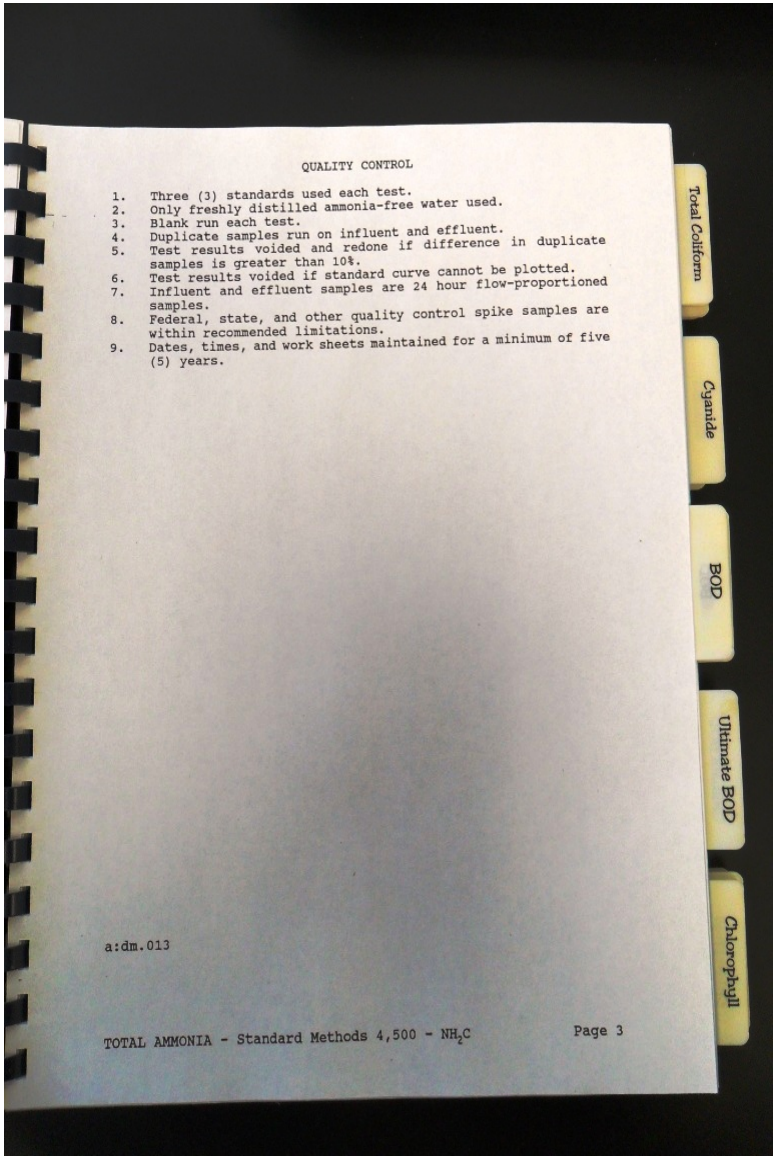
   A. Deduct amount of NH_3-N in water used for diluting original sample before computing final nitrogen value.
   B. Deduct also reagent blank for volume of borate buffer and *6N* NaOH solutions used with sample.
   C. Compute total NH_3-N by the following equation:

$$\text{mg } NH_3\text{-N/L(52 mL final volume)} = \frac{A}{\text{mL sample}} \times \frac{B}{C}$$

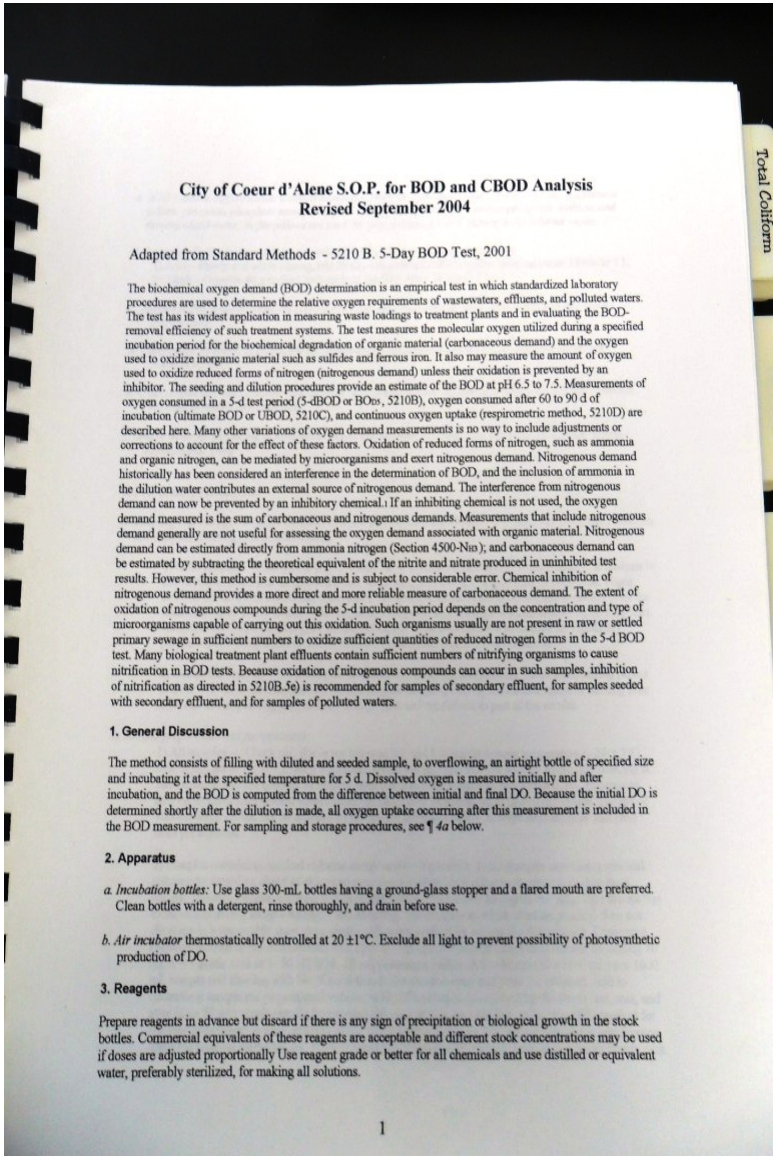
where:
- A = ug NG_3-N (52 mL final volume),
- B = total volume distillate collected, mL, including acid absorbent, and
- C = volume distillate taken for nesslerization, mL.

The ration *B/C* applies only to distilled samples; ignore in direct nesslerization.

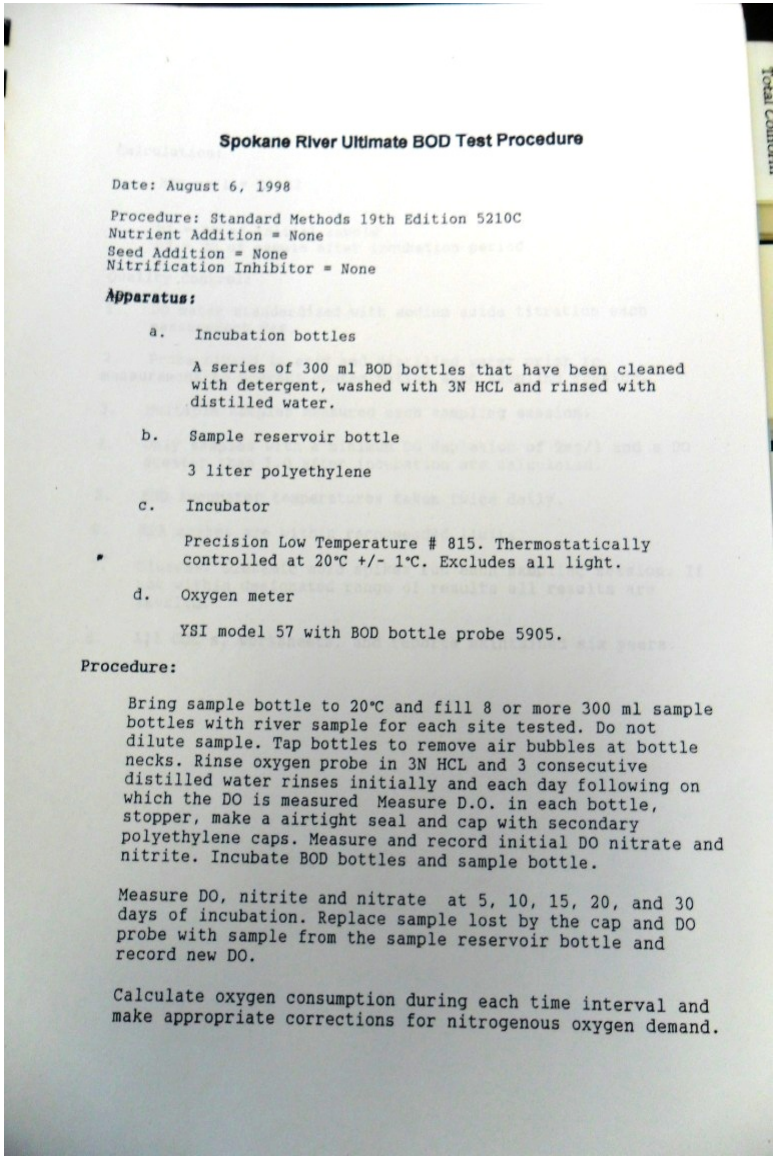
Photograph by David Domingo (EPA) on September 11, 2012 looking at standard procedures for total ammonia analysis. Note the reference to calibration standards and blank preparation.



Photograph by David Domingo (EPA) on September 11, 2012 looking at quality control section for total ammonia analysis.



Photograph by David Domingo (EPA) on September 11, 2012 looking at standard operating procedures for BOD and CBOD analysis. Note the reference to Standard Methods.



Spokane River Ultimate BOD Test Procedure

Date: August 6, 1998

Procedure: Standard Methods 19th Edition 5210C
Nutrient Addition = None
Seed Addition = None
Nitrification Inhibitor = None

Apparatus:

a. Incubation bottles

A series of 300 ml BOD bottles that have been cleaned with detergent, washed with 3N HCL and rinsed with distilled water.

b. Sample reservoir bottle

3 liter polyethylene

c. Incubator

Precision Low Temperature # 815. Thermostatically controlled at 20°C +/- 1°C. Excludes all light.

d. Oxygen meter

YSI model 57 with BOD bottle probe 5905.

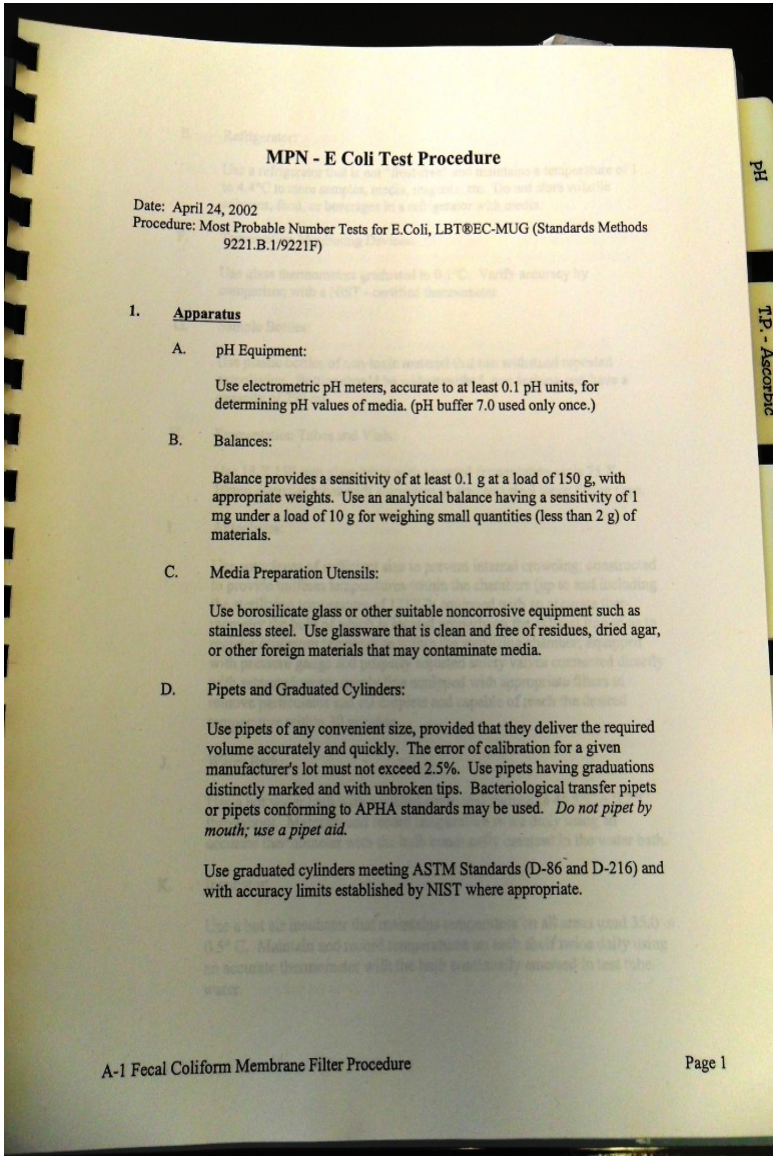
Procedure:

Bring sample bottle to 20°C and fill 8 or more 300 ml sample bottles with river sample for each site tested. Do not dilute sample. Tap bottles to remove air bubbles at bottle necks. Rinse oxygen probe in 3N HCL and 3 consecutive distilled water rinses initially and each day following on which the DO is measured Measure D.O. in each bottle, stopper, make a airtight seal and cap with secondary polyethylene caps. Measure and record initial DO nitrate and nitrite. Incubate BOD bottles and sample bottle.

Measure DO, nitrite and nitrate at 5, 10, 15, 20, and 30 days of incubation. Replace sample lost by the cap and DO probe with sample from the sample reservoir bottle and record new DO.

Calculate oxygen consumption during each time interval and make appropriate corrections for nitrogenous oxygen demand.

Photograph by David Domingo (EPA) on September 11, 2012 looking at standard operating procedures for BOD analysis for receiving water samples. Note the description of sample collection and handling.



MPN - E Coli Test Procedure

Date: April 24, 2002
Procedure: Most Probable Number Tests for E.Coli, LBT®EC-MUG (Standards Methods 9221.B.1/9221F)

1. **Apparatus**

A. pH Equipment:

Use electrometric pH meters, accurate to at least 0.1 pH units, for determining pH values of media. (pH buffer 7.0 used only once.)

B. Balances:

Balance provides a sensitivity of at least 0.1 g at a load of 150 g, with appropriate weights. Use an analytical balance having a sensitivity of 1 mg under a load of 10 g for weighing small quantities (less than 2 g) of materials.

C. Media Preparation Utensils:

Use borosilicate glass or other suitable noncorrosive equipment such as stainless steel. Use glassware that is clean and free of residues, dried agar, or other foreign materials that may contaminate media.

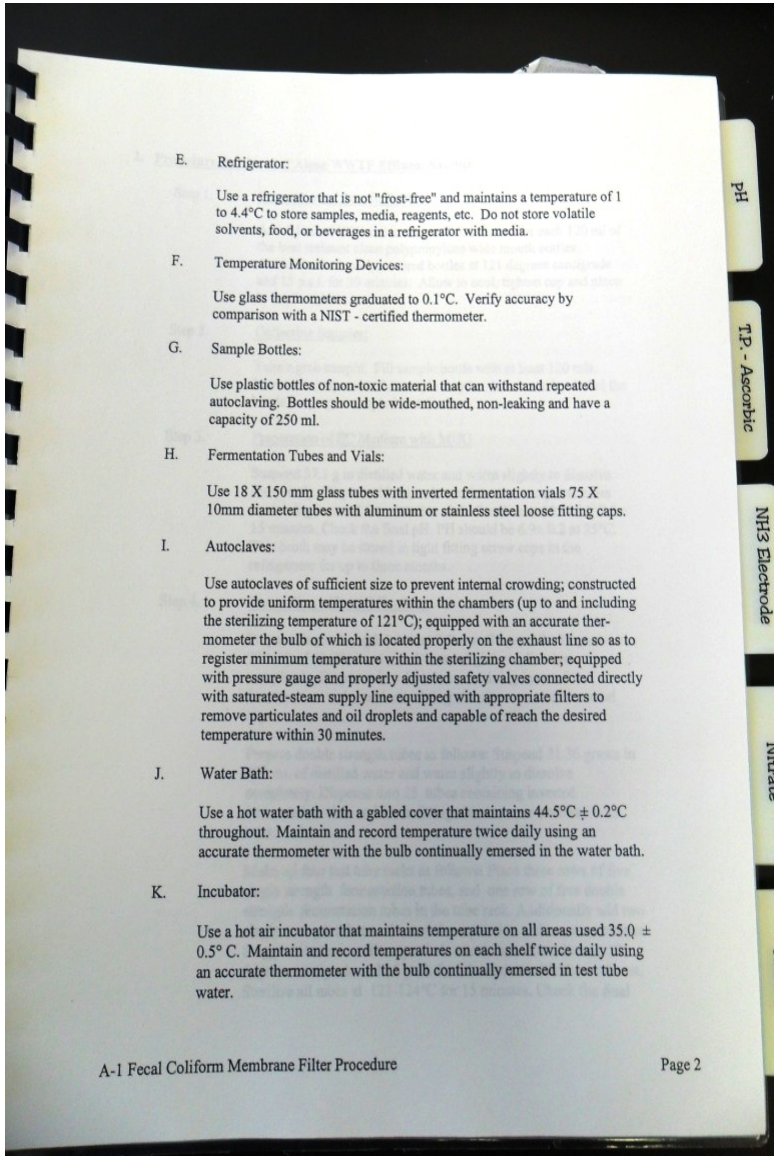
D. Pipets and Graduated Cylinders:

Use pipets of any convenient size, provided that they deliver the required volume accurately and quickly. The error of calibration for a given manufacturer's lot must not exceed 2.5%. Use pipets having graduations distinctly marked and with unbroken tips. Bacteriological transfer pipets or pipets conforming to APHA standards may be used. *Do not pipet by mouth; use a pipet aid.*

Use graduated cylinders meeting ASTM Standards (D-86 and D-216) and with accuracy limits established by NIST where appropriate.

A-1 Fecal Coliform Membrane Filter Procedure Page 1

Photograph by David Domingo (EPA) on September 11, 2012 looking at standard operating procedures for E. coli analysis.



E. Refrigerator:

Use a refrigerator that is not "frost-free" and maintains a temperature of 1 to 4.4°C to store samples, media, reagents, etc. Do not store volatile solvents, food, or beverages in a refrigerator with media.

F. Temperature Monitoring Devices:

Use glass thermometers graduated to 0.1°C. Verify accuracy by comparison with a NIST - certified thermometer.

G. Sample Bottles:

Use plastic bottles of non-toxic material that can withstand repeated autoclaving. Bottles should be wide-mouthed, non-leaking and have a capacity of 250 ml.

H. Fermentation Tubes and Vials:

Use 18 X 150 mm glass tubes with inverted fermentation vials 75 X 10mm diameter tubes with aluminum or stainless steel loose fitting caps.

I. Autoclaves:

Use autoclaves of sufficient size to prevent internal crowding; constructed to provide uniform temperatures within the chambers (up to and including the sterilizing temperature of 121°C); equipped with an accurate ther-mometer the bulb of which is located properly on the exhaust line so as to register minimum temperature within the sterilizing chamber; equipped with pressure gauge and properly adjusted safety valves connected directly with saturated-steam supply line equipped with appropriate filters to remove particulates and oil droplets and capable of reach the desired temperature within 30 minutes.

J. Water Bath:

Use a hot water bath with a gabled cover that maintains 44.5°C ± 0.2°C throughout. Maintain and record temperature twice daily using an accurate thermometer with the bulb continually emersed in the water bath.

K. Incubator:

Use a hot air incubator that maintains temperature on all areas used 35.0 ± 0.5° C. Maintain and record temperatures on each shelf twice daily using an accurate thermometer with the bulb continually emersed in test tube water.

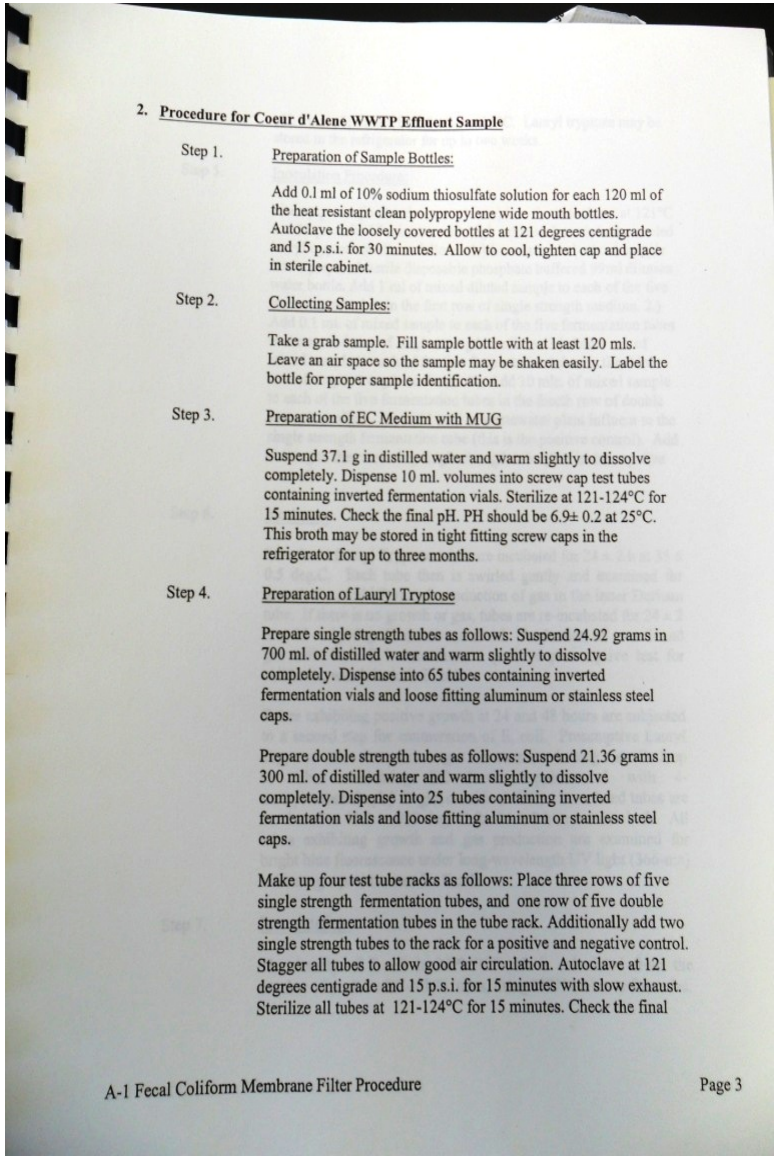
A-1 Fecal Coliform Membrane Filter Procedure Page 2

pH

T.P. - Ascorbic

NH3 Electrode

Photograph by David Domingo (EPA) on September 11, 2012 looking at standard operating procedures for E. coli analysis.



2. Procedure for Coeur d'Alene WWTP Effluent Sample

Step 1. Preparation of Sample Bottles:

Add 0.1 ml of 10% sodium thiosulfate solution for each 120 ml of the heat resistant clean polypropylene wide mouth bottles. Autoclave the loosely covered bottles at 121 degrees centigrade and 15 p.s.i. for 30 minutes. Allow to cool, tighten cap and place in sterile cabinet.

Step 2. Collecting Samples:

Take a grab sample. Fill sample bottle with at least 120 mls. Leave an air space so the sample may be shaken easily. Label the bottle for proper sample identification.

Step 3. Preparation of EC Medium with MUG

Suspend 37.1 g in distilled water and warm slightly to dissolve completely. Dispense 10 ml. volumes into screw cap test tubes containing inverted fermentation vials. Sterilize at 121-124°C for 15 minutes. Check the final pH. PH should be 6.9± 0.2 at 25°C. This broth may be stored in tight fitting screw caps in the refrigerator for up to three months.

Step 4. Preparation of Lauryl Tryptose

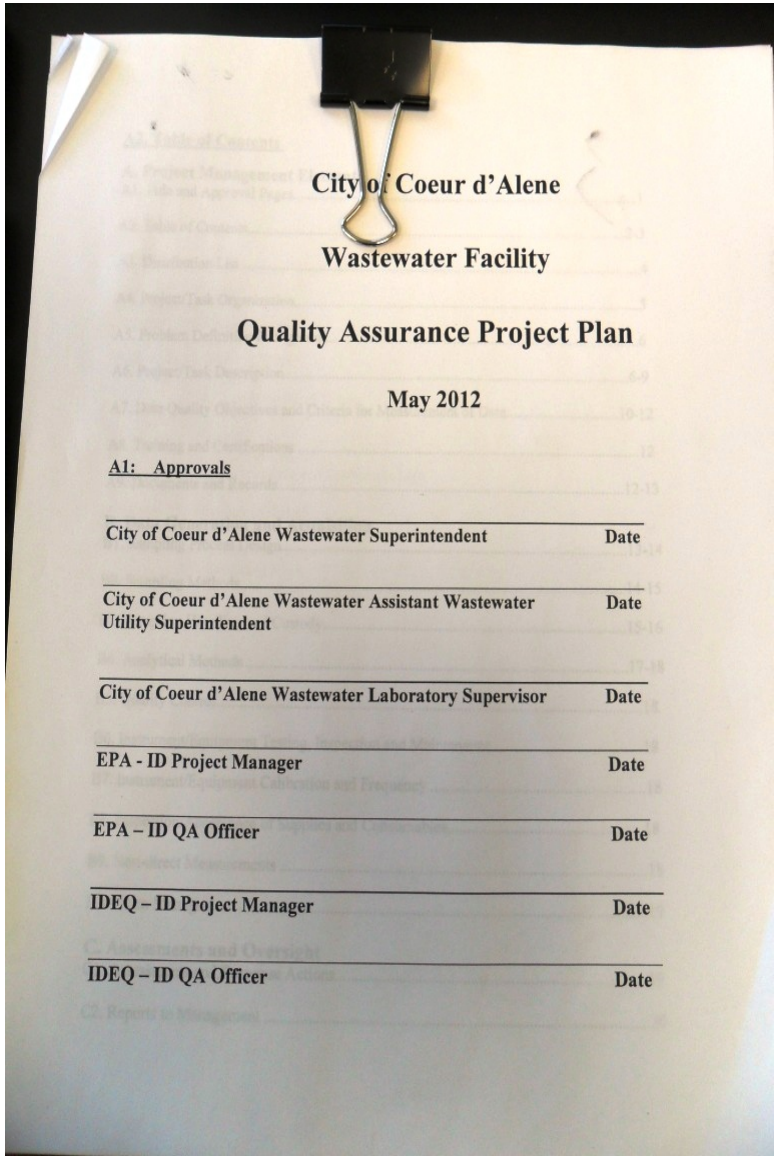
Prepare single strength tubes as follows: Suspend 24.92 grams in 700 ml. of distilled water and warm slightly to dissolve completely. Dispense into 65 tubes containing inverted fermentation vials and loose fitting aluminum or stainless steel caps.

Prepare double strength tubes as follows: Suspend 21.36 grams in 300 ml. of distilled water and warm slightly to dissolve completely. Dispense into 25 tubes containing inverted fermentation vials and loose fitting aluminum or stainless steel caps.

Make up four test tube racks as follows: Place three rows of five single strength fermentation tubes, and one row of five double strength fermentation tubes in the tube rack. Additionally add two single strength tubes to the rack for a positive and negative control. Stagger all tubes to allow good air circulation. Autoclave at 121 degrees centigrade and 15 p.s.i. for 15 minutes with slow exhaust. Sterilize all tubes at 121-124°C for 15 minutes. Check the final

A-1 Fecal Coliform Membrane Filter Procedure Page 3

Photograph by David Domingo (EPA) on September 11, 2012 looking at standard operating procedures for E. coli analysis.



City of Coeur d'Alene

Wastewater Facility

Quality Assurance Project Plan

May 2012

A1: Approvals

City of Coeur d'Alene Wastewater Superintendent — Date

City of Coeur d'Alene Wastewater Assistant Wastewater Utility Superintendent — Date

City of Coeur d'Alene Wastewater Laboratory Supervisor — Date

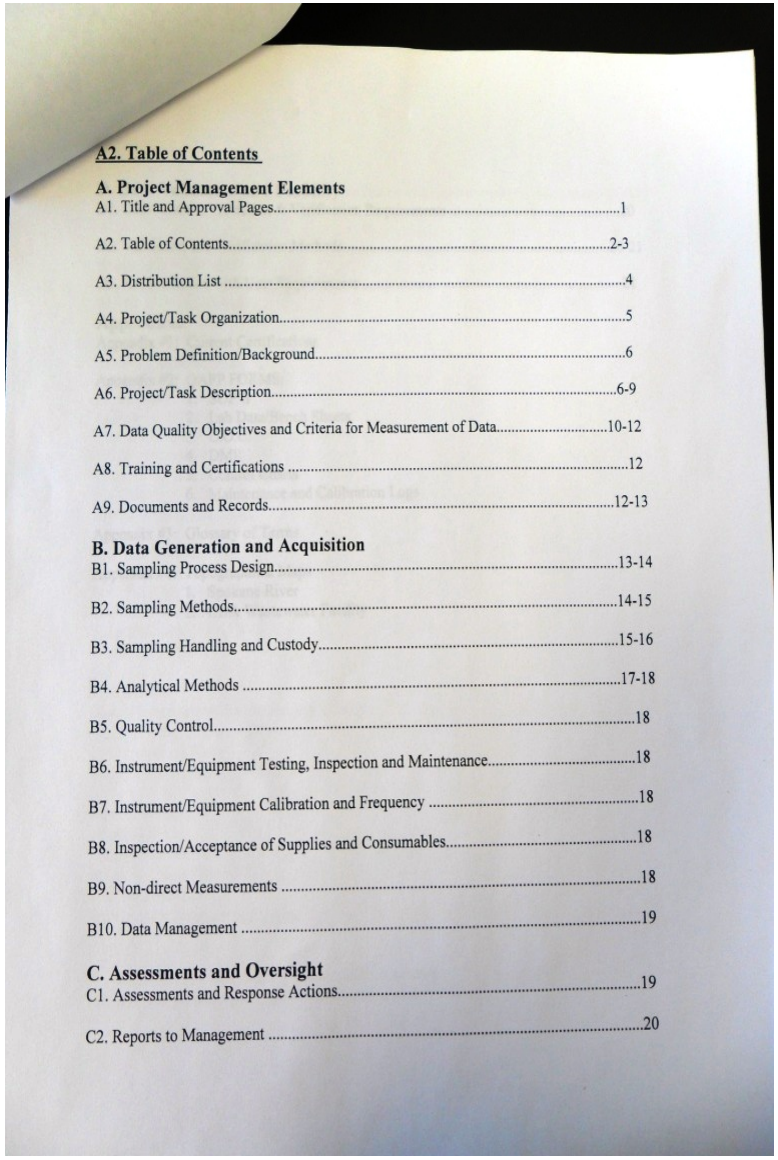
EPA - ID Project Manager — Date

EPA – ID QA Officer — Date

IDEQ – ID Project Manager — Date

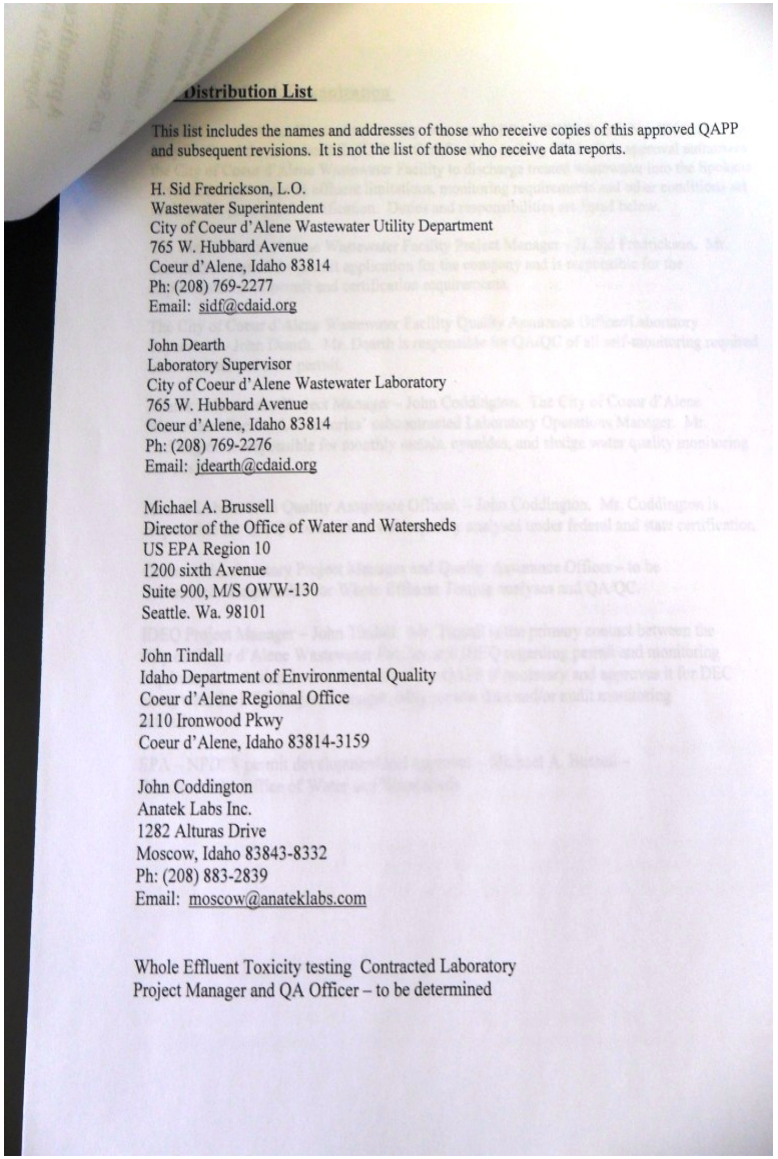
IDEQ – ID QA Officer — Date

Photograph by David Domingo (EPA) on September 11, 2012 looking at the May 2012 QAP for the onsite laboratory. Note this QAP is based on the 2007 draft permit which has not been finalized. I explained to Mr. Keil that the draft permit and other recent final permits do not require permittees to submit the QAP for EPA review and approval.



A2. Table of Contents

Photograph by David Domingo (EPA) on September 11, 2012 looking at the May 2012 QAP for the onsite laboratory.



Distribution List

This list includes the names and addresses of those who receive copies of this approved QAPP and subsequent revisions. It is not the list of those who receive data reports.

H. Sid Fredrickson, L.O.
Wastewater Superintendent
City of Coeur d'Alene Wastewater Utility Department
765 W. Hubbard Avenue
Coeur d'Alene, Idaho 83814
Ph: (208) 769-2277
Email: sidf@cdaid.org

John Dearth
Laboratory Supervisor
City of Coeur d'Alene Wastewater Laboratory
765 W. Hubbard Avenue
Coeur d'Alene, Idaho 83814
Ph: (208) 769-2276
Email: jdearth@cdaid.org

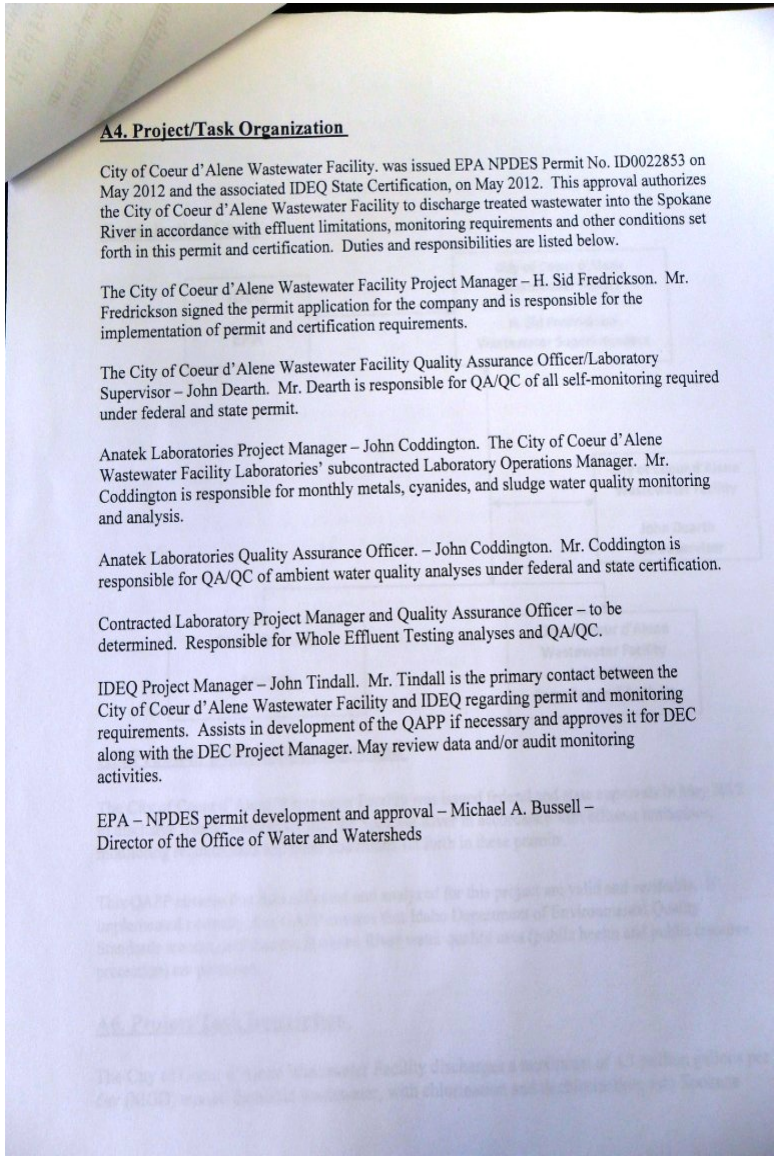
Michael A. Brussell
Director of the Office of Water and Watersheds
US EPA Region 10
1200 sixth Avenue
Suite 900, M/S OWW-130
Seattle. Wa. 98101

John Tindall
Idaho Department of Environmental Quality
Coeur d'Alene Regional Office
2110 Ironwood Pkwy
Coeur d'Alene, Idaho 83814-3159

John Coddington
Anatek Labs Inc.
1282 Alturas Drive
Moscow, Idaho 83843-8332
Ph: (208) 883-2839
Email: moscow@anateklabs.com

Whole Effluent Toxicity testing Contracted Laboratory
Project Manager and QA Officer – to be determined

Photograph by David Domingo (EPA) on September 11, 2012 looking at the May 2012 QAP for the onsite laboratory. Note this QAP is based on the 2007 draft permit which has not been finalized.



A4. Project/Task Organization

City of Coeur d'Alene Wastewater Facility. was issued EPA NPDES Permit No. ID0022853 on May 2012 and the associated IDEQ State Certification, on May 2012. This approval authorizes the City of Coeur d'Alene Wastewater Facility to discharge treated wastewater into the Spokane River in accordance with effluent limitations, monitoring requirements and other conditions set forth in this permit and certification. Duties and responsibilities are listed below.

The City of Coeur d'Alene Wastewater Facility Project Manager – H. Sid Fredrickson. Mr. Fredrickson signed the permit application for the company and is responsible for the implementation of permit and certification requirements.

The City of Coeur d'Alene Wastewater Facility Quality Assurance Officer/Laboratory Supervisor – John Dearth. Mr. Dearth is responsible for QA/QC of all self-monitoring required under federal and state permit.

Anatek Laboratories Project Manager – John Coddington. The City of Coeur d'Alene Wastewater Facility Laboratories' subcontracted Laboratory Operations Manager. Mr. Coddington is responsible for monthly metals, cyanides, and sludge water quality monitoring and analysis.

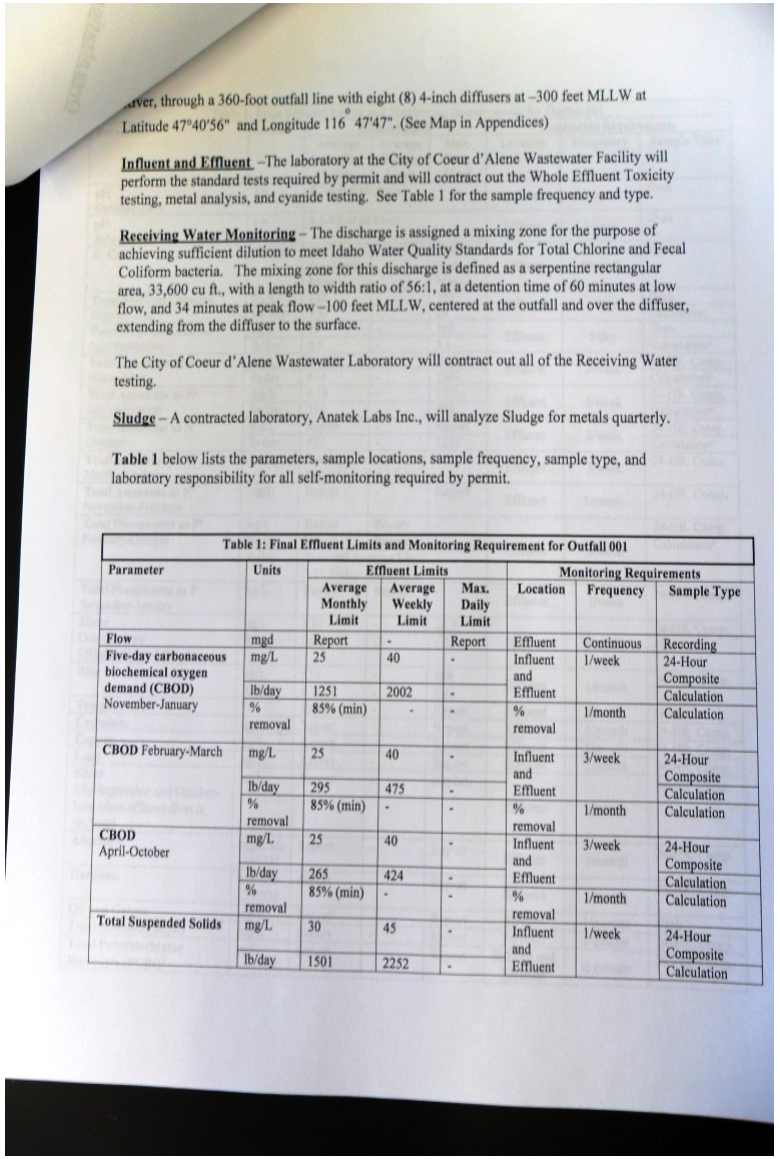
Anatek Laboratories Quality Assurance Officer. – John Coddington. Mr. Coddington is responsible for QA/QC of ambient water quality analyses under federal and state certification.

Contracted Laboratory Project Manager and Quality Assurance Officer – to be determined. Responsible for Whole Effluent Testing analyses and QA/QC.

IDEQ Project Manager – John Tindall. Mr. Tindall is the primary contact between the City of Coeur d'Alene Wastewater Facility and IDEQ regarding permit and monitoring requirements. Assists in development of the QAPP if necessary and approves it for DEC along with the DEC Project Manager. May review data and/or audit monitoring activities.

EPA – NPDES permit development and approval – Michael A. Bussell –
Director of the Office of Water and Watersheds

Photograph by David Domingo (EPA) on September 11, 2012 looking at the May 2012 QAP for the onsite laboratory. Note this QAP is based on the 2007 draft permit which has not been finalized.



...iver, through a 360-foot outfall line with eight (8) 4-inch diffusers at –300 feet MLLW at Latitude 47°40'56" and Longitude 116° 47'47". (See Map in Appendices)

Influent and Effluent –The laboratory at the City of Coeur d'Alene Wastewater Facility will perform the standard tests required by permit and will contract out the Whole Effluent Toxicity testing, metal analysis, and cyanide testing. See Table 1 for the sample frequency and type.

Receiving Water Monitoring – The discharge is assigned a mixing zone for the purpose of achieving sufficient dilution to meet Idaho Water Quality Standards for Total Chlorine and Fecal Coliform bacteria. The mixing zone for this discharge is defined as a serpentine rectangular area, 33,600 cu ft., with a length to width ratio of 56:1, at a detention time of 60 minutes at low flow, and 34 minutes at peak flow –100 feet MLLW, centered at the outfall and over the diffuser, extending from the diffuser to the surface.

The City of Coeur d'Alene Wastewater Laboratory will contract out all of the Receiving Water testing.

Sludge – A contracted laboratory, Anatek Labs Inc., will analyze Sludge for metals quarterly.

Table 1 below lists the parameters, sample locations, sample frequency, sample type, and laboratory responsibility for all self-monitoring required by permit.

Table 1: Final Effluent Limits and Monitoring Requirement for Outfall 001

Parameter	Units	Effluent Limits			Monitoring Requirements		
		Average Monthly Limit	Average Weekly Limit	Max. Daily Limit	Location	Frequency	Sample Type
Flow	mgd	Report	-	Report	Effluent	Continuous	Recording
Five-day carbonaceous biochemical oxygen demand (CBOD) November-January	mg/L	25	40	-	Influent and Effluent	1/week	24-Hour Composite
	lb/day	1251	2002	-			Calculation
	% removal	85% (min)	-	-	% removal	1/month	Calculation
CBOD February-March	mg/L	25	40	-	Influent and Effluent	3/week	24-Hour Composite
	lb/day	295	475	-			Calculation
	% removal	85% (min)	-	-	% removal	1/month	Calculation
CBOD April-October	mg/L	25	40	-	Influent and Effluent	3/week	24-Hour Composite
	lb/day	265	424	-			Calculation
	% removal	85% (min)	-	-	% removal	1/month	Calculation
Total Suspended Solids	mg/L	30	45	-	Influent and Effluent	1/week	24-Hour Composite
	lb/day	1501	2252	-			Calculation

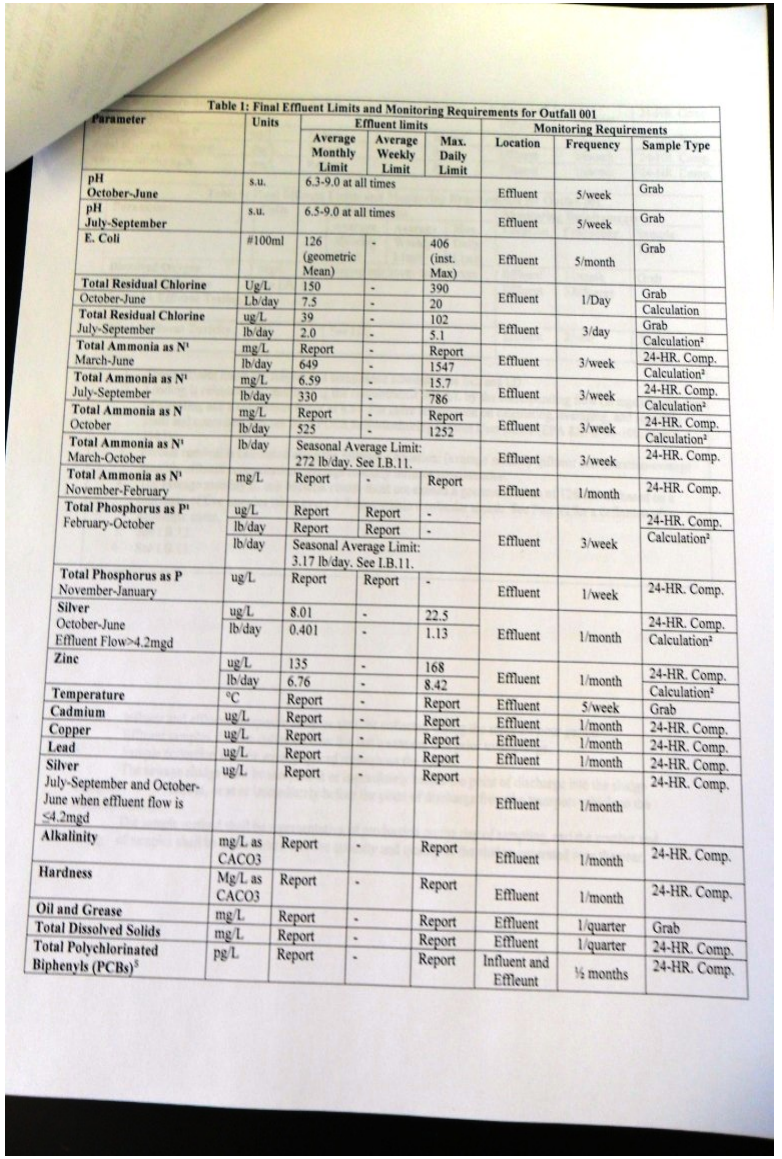
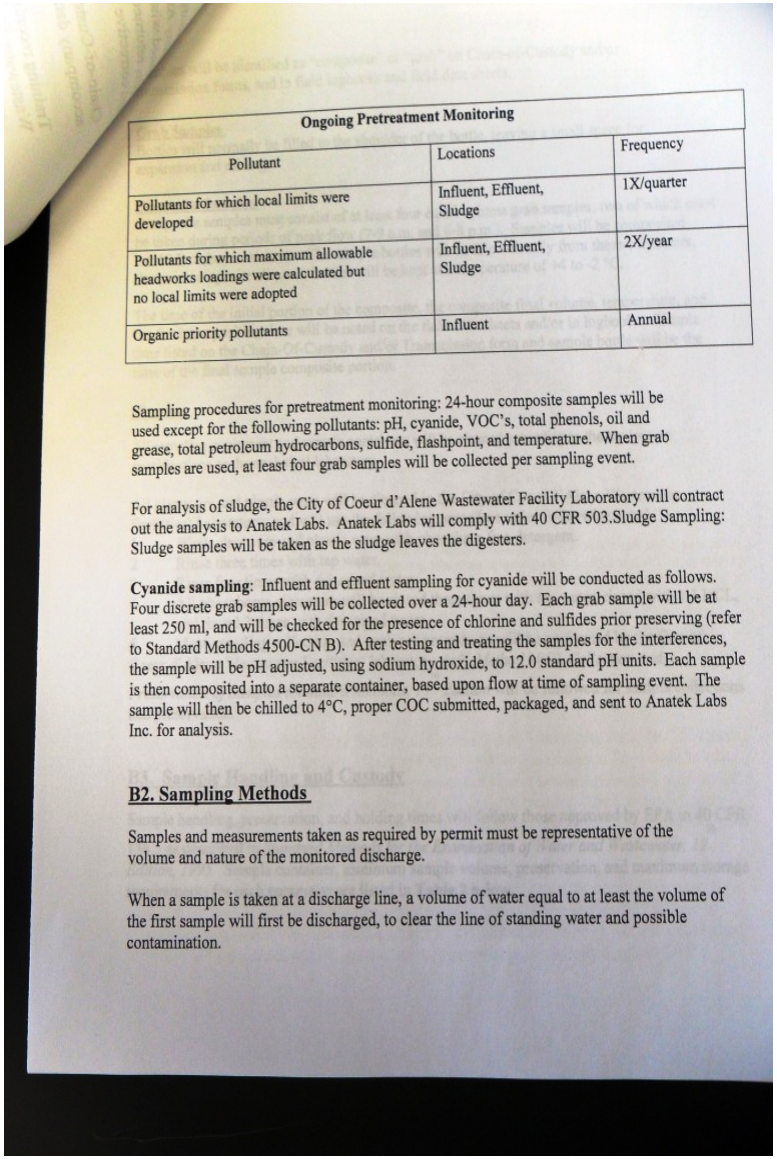


Table 1: Final Effluent Limits and Monitoring Requirements for Outfall 001

Parameter	Units	Effluent limits			Monitoring Requirements		
		Average Monthly Limit	Average Weekly Limit	Max. Daily Limit	Location	Frequency	Sample Type
pH October-June	s.u.	6.3-9.0 at all times			Effluent	5/week	Grab
pH July-September	s.u.	6.5-9.0 at all times			Effluent	5/week	Grab
E. Coli	#100ml	126 (geometric Mean)	-	406 (inst. Max)	Effluent	5/month	Grab
Total Residual Chlorine	Ug/L	150	-	390	Effluent	1/Day	Grab
October-June	Lb/day	7.5	-	20			Calculation
Total Residual Chlorine	ug/L	39	-	102	Effluent	3/day	Grab
July-September	lb/day	2.0	-	5.1			Calculation[2]
Total Ammonia as N[1]	mg/L	Report	-	Report	Effluent	3/week	24-HR. Comp.
March-June	lb/day	649	-	1547			Calculation[2]
Total Ammonia as N[1]	mg/L	6.59	-	15.7	Effluent	3/week	24-HR. Comp.
July-September	lb/day	330	-	786			Calculation[2]
Total Ammonia as N	mg/L	Report	-	Report	Effluent	3/week	24-HR. Comp.
October	lb/day	525	-	1252			Calculation[2]
Total Ammonia as N[1] March-October	lb/day	Seasonal Average Limit: 272 lb/day. See I.B.11.			Effluent	3/week	24-HR. Comp.
Total Ammonia as N[1] November-February	mg/L	Report	-	Report	Effluent	1/month	24-HR. Comp.
Total Phosphorus as P[1] February-October	ug/L	Report	Report	-	Effluent	3/week	24-HR. Comp.
	lb/day	Report	Report	-			Calculation[2]
	lb/day	Seasonal Average Limit: 3.17 lb/day. See I.B.11.					
Total Phosphorus as P November-January	ug/L	Report	Report	-	Effluent	1/week	24-HR. Comp.
Silver October-June Effluent Flow>4.2mgd	ug/L	8.01	-	22.5	Effluent	1/month	24-HR. Comp.
	lb/day	0.401	-	1.13			Calculation[2]
Zinc	ug/L	135	-	168	Effluent	1/month	24-HR. Comp.
	lb/day	6.76	-	8.42			Calculation[2]
Temperature	°C	Report	-	Report	Effluent	5/week	Grab
Cadmium	ug/L	Report	-	Report	Effluent	1/month	24-HR. Comp.
Copper	ug/L	Report	-	Report	Effluent	1/month	24-HR. Comp.
Lead	ug/L	Report	-	Report	Effluent	1/month	24-HR. Comp.
Silver July-September and October-June when effluent flow is ≤4.2mgd	ug/L	Report	-	Report	Effluent	1/month	24-HR. Comp.
Alkalinity	mg/L as CACO3	Report	-	Report	Effluent	1/month	24-HR. Comp.
Hardness	Mg/L as CACO3	Report	-	Report	Effluent	1/month	24-HR. Comp.
Oil and Grease	mg/L	Report	-	Report	Effluent	1/quarter	Grab
Total Dissolved Solids	mg/L	Report	-	Report	Effluent	1/quarter	24-HR. Comp.
Total Polychlorinated Biphenyls (PCBs)[5]	pg/L	Report	-	Report	Influent and Effleunt	½ months	24-HR. Comp.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the May 2012 QAP for the onsite laboratory. Note this QAP is based on the 2007 draft permit which has not been finalized.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the May 2012 QAP for the onsite laboratory. Note this QAP is based on the 2007 draft permit which has not been finalized.



Ongoing Pretreatment Monitoring		
Pollutant	Locations	Frequency
Pollutants for which local limits were developed	Influent, Effluent, Sludge	1X/quarter
Pollutants for which maximum allowable headworks loadings were calculated but no local limits were adopted	Influent, Effluent, Sludge	2X/year
Organic priority pollutants	Influent	Annual

Sampling procedures for pretreatment monitoring: 24-hour composite samples will be used except for the following pollutants: pH, cyanide, VOC's, total phenols, oil and grease, total petroleum hydrocarbons, sulfide, flashpoint, and temperature. When grab samples are used, at least four grab samples will be collected per sampling event.

For analysis of sludge, the City of Coeur d'Alene Wastewater Facility Laboratory will contract out the analysis to Anatek Labs. Anatek Labs will comply with 40 CFR 503.Sludge Sampling: Sludge samples will be taken as the sludge leaves the digesters.

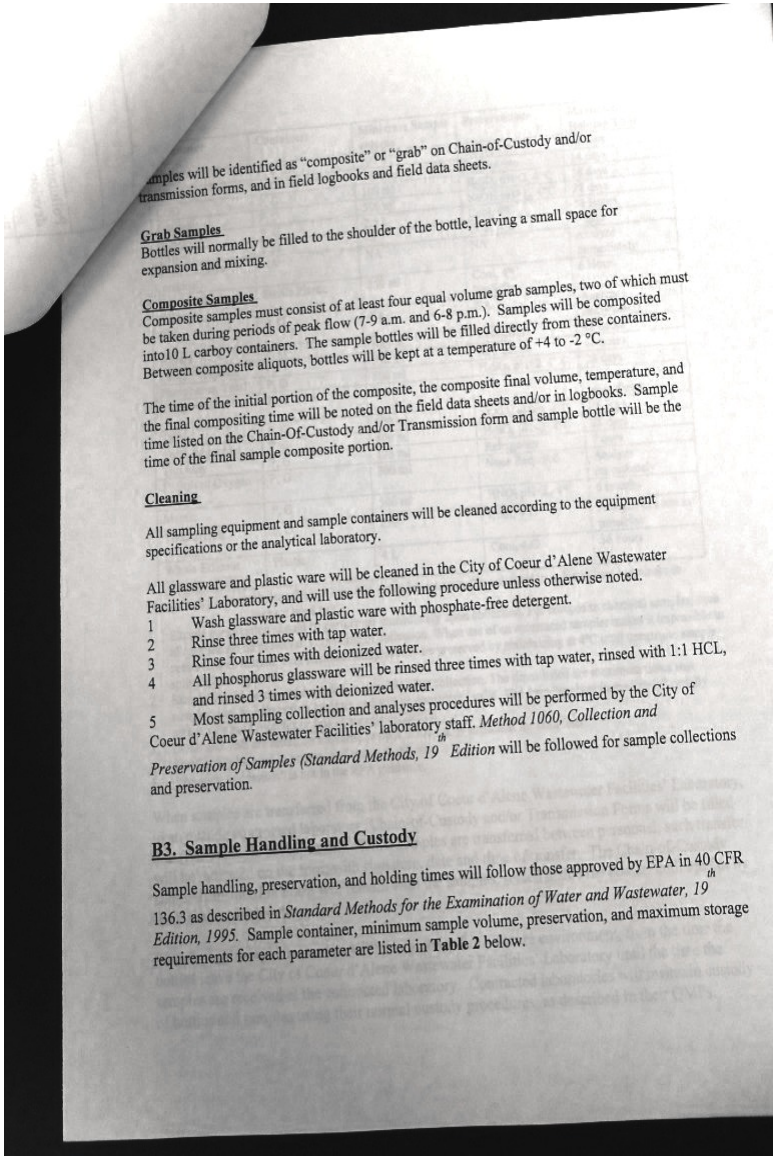
Cyanide sampling: Influent and effluent sampling for cyanide will be conducted as follows. Four discrete grab samples will be collected over a 24-hour day. Each grab sample will be at least 250 ml, and will be checked for the presence of chlorine and sulfides prior preserving (refer to Standard Methods 4500-CN B). After testing and treating the samples for the interferences, the sample will be pH adjusted, using sodium hydroxide, to 12.0 standard pH units. Each sample is then composited into a separate container, based upon flow at time of sampling event. The sample will then be chilled to 4°C, proper COC submitted, packaged, and sent to Anatek Labs Inc. for analysis.

B2. Sampling Methods

Samples and measurements taken as required by permit must be representative of the volume and nature of the monitored discharge.

When a sample is taken at a discharge line, a volume of water equal to at least the volume of the first sample will first be discharged, to clear the line of standing water and possible contamination.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the May 2012 QAP for the onsite laboratory. Note this QAP is based on the 2007 draft permit which has not been finalized.



mples will be identified as "composite" or "grab" on Chain-of-Custody and/or transmission forms, and in field logbooks and field data sheets.

Grab Samples
Bottles will normally be filled to the shoulder of the bottle, leaving a small space for expansion and mixing.

Composite Samples
Composite samples must consist of at least four equal volume grab samples, two of which must be taken during periods of peak flow (7-9 a.m. and 6-8 p.m.). Samples will be composited into10 L carboy containers. The sample bottles will be filled directly from these containers. Between composite aliquots, bottles will be kept at a temperature of +4 to -2 °C.

The time of the initial portion of the composite, the composite final volume, temperature, and the final compositing time will be noted on the field data sheets and/or in logbooks. Sample time listed on the Chain-Of-Custody and/or Transmission form and sample bottle will be the time of the final sample composite portion.

Cleaning

All sampling equipment and sample containers will be cleaned according to the equipment specifications or the analytical laboratory.

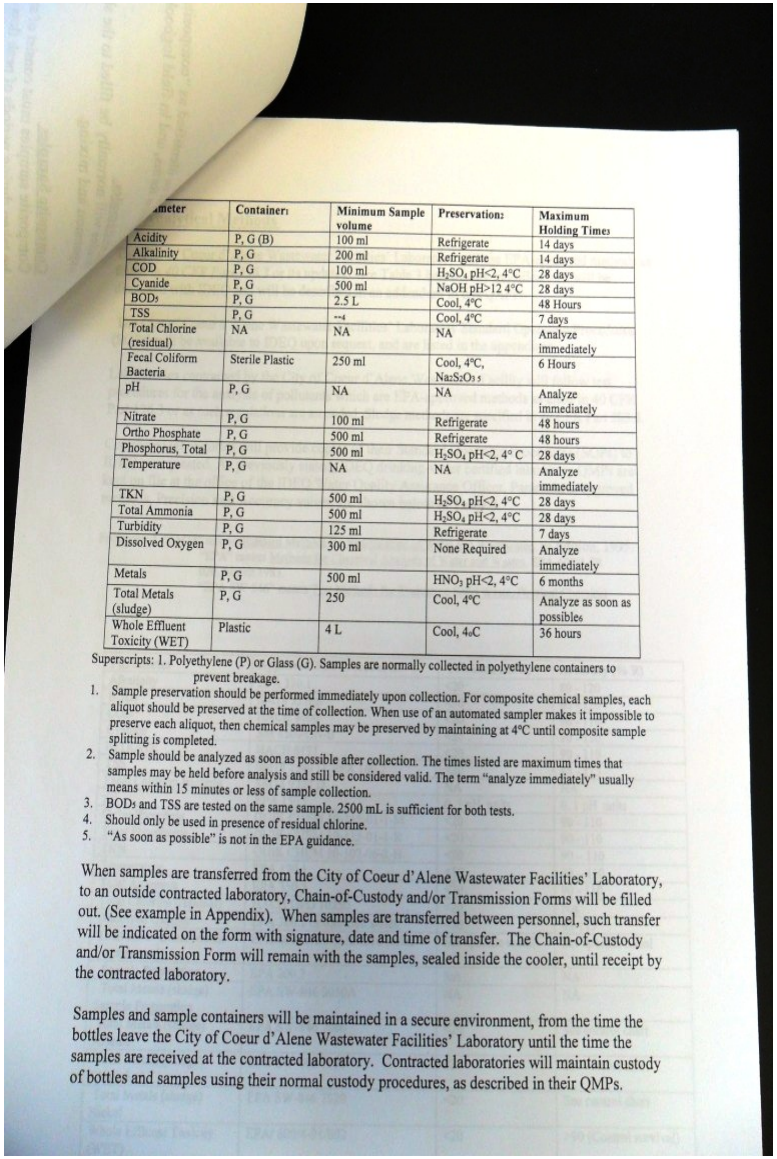
All glassware and plastic ware will be cleaned in the City of Coeur d'Alene Wastewater Facilities' Laboratory, and will use the following procedure unless otherwise noted.

1 Wash glassware and plastic ware with phosphate-free detergent.
2 Rinse three times with tap water.
3 Rinse four times with deionized water.
4 All phosphorus glassware will be rinsed three times with tap water, rinsed with 1:1 HCL, and rinsed 3 times with deionized water.
5 Most sampling collection and analyses procedures will be performed by the City of Coeur d'Alene Wastewater Facilities' laboratory staff. *Method 1060, Collection and Preservation of Samples (Standard Methods, 19th Edition* will be followed for sample collections and preservation.

B3. Sample Handling and Custody

Sample handling, preservation, and holding times will follow those approved by EPA in 40 CFR 136.3 as described in *Standard Methods for the Examination of Water and Wastewater, 19th Edition, 1995.* Sample container, minimum sample volume, preservation, and maximum storage requirements for each parameter are listed in **Table 2** below.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the May 2012 QAP for the onsite laboratory. Note this QAP is based on the 2007 draft permit which has not been finalized.



...meter	Container[1]	Minimum Sample volume	Preservation[2]	Maximum Holding Time[3]
Acidity	P, G (B)	100 ml	Refrigerate	14 days
Alkalinity	P, G	200 ml	Refrigerate	14 days
COD	P, G	100 ml	H_2SO_4 pH<2, 4°C	28 days
Cyanide	P, G	500 ml	NaOH pH>12 4°C	28 days
BOD_5	P, G	2.5 L	Cool, 4°C	48 Hours
TSS	P, G	--[4]	Cool, 4°C	7 days
Total Chlorine (residual)	NA	NA	NA	Analyze immediately
Fecal Coliform Bacteria	Sterile Plastic	250 ml	Cool, 4°C, $Na_2S_2O_3$[5]	6 Hours
pH	P, G	NA	NA	Analyze immediately
Nitrate	P, G	100 ml	Refrigerate	48 hours
Ortho Phosphate	P, G	500 ml	Refrigerate	48 hours
Phosphorus, Total	P, G	500 ml	H_2SO_4 pH<2, 4° C	28 days
Temperature	P, G	NA	NA	Analyze immediately
TKN	P, G	500 ml	H_2SO_4 pH<2, 4°C	28 days
Total Ammonia	P, G	500 ml	H_2SO_4 pH<2, 4°C	28 days
Turbidity	P, G	125 ml	Refrigerate	7 days
Dissolved Oxygen	P, G	300 ml	None Required	Analyze immediately
Metals	P, G	500 ml	HNO_3 pH<2, 4°C	6 months
Total Metals (sludge)	P, G	250	Cool, 4°C	Analyze as soon as possible[6]
Whole Effluent Toxicity (WET)	Plastic	4 L	Cool, 4°C	36 hours

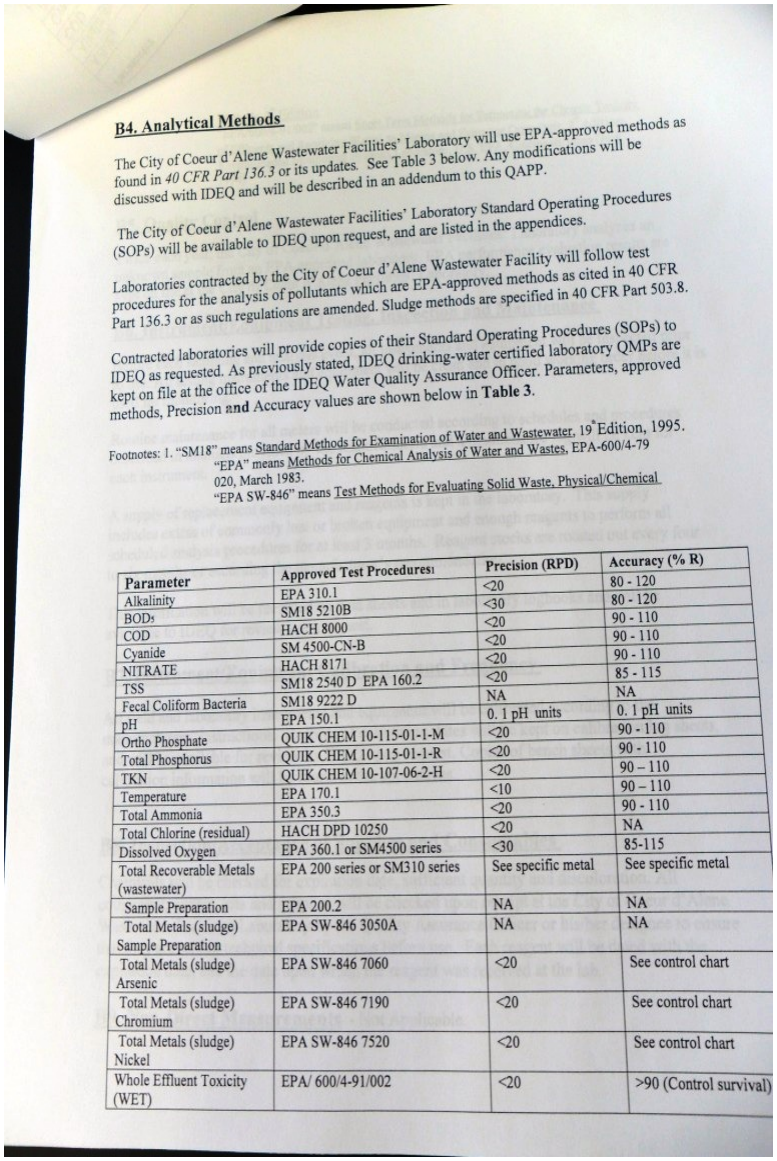
Superscripts: 1. Polyethylene (P) or Glass (G). Samples are normally collected in polyethylene containers to prevent breakage.

1. Sample preservation should be performed immediately upon collection. For composite chemical samples, each aliquot should be preserved at the time of collection. When use of an automated sampler makes it impossible to preserve each aliquot, then chemical samples may be preserved by maintaining at 4°C until composite sample splitting is completed.
2. Sample should be analyzed as soon as possible after collection. The times listed are maximum times that samples may be held before analysis and still be considered valid. The term "analyze immediately" usually means within 15 minutes or less of sample collection.
3. BOD_5 and TSS are tested on the same sample. 2500 mL is sufficient for both tests.
4. Should only be used in presence of residual chlorine.
5. "As soon as possible" is not in the EPA guidance.

When samples are transferred from the City of Coeur d'Alene Wastewater Facilities' Laboratory, to an outside contracted laboratory, Chain-of-Custody and/or Transmission Forms will be filled out. (See example in Appendix). When samples are transferred between personnel, such transfer will be indicated on the form with signature, date and time of transfer. The Chain-of-Custody and/or Transmission Form will remain with the samples, sealed inside the cooler, until receipt by the contracted laboratory.

Samples and sample containers will be maintained in a secure environment, from the time the bottles leave the City of Coeur d'Alene Wastewater Facilities' Laboratory until the time the samples are received at the contracted laboratory. Contracted laboratories will maintain custody of bottles and samples using their normal custody procedures, as described in their QMPs.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the May 2012 QAP for the onsite laboratory. Note this QAP is based on the 2007 draft permit which has not been finalized.



B4. Analytical Methods

The City of Coeur d'Alene Wastewater Facilities' Laboratory will use EPA-approved methods as found in *40 CFR Part 136.3* or its updates. See Table 3 below. Any modifications will be discussed with IDEQ and will be described in an addendum to this QAPP.

The City of Coeur d'Alene Wastewater Facilities' Laboratory Standard Operating Procedures (SOPs) will be available to IDEQ upon request, and are listed in the appendices.

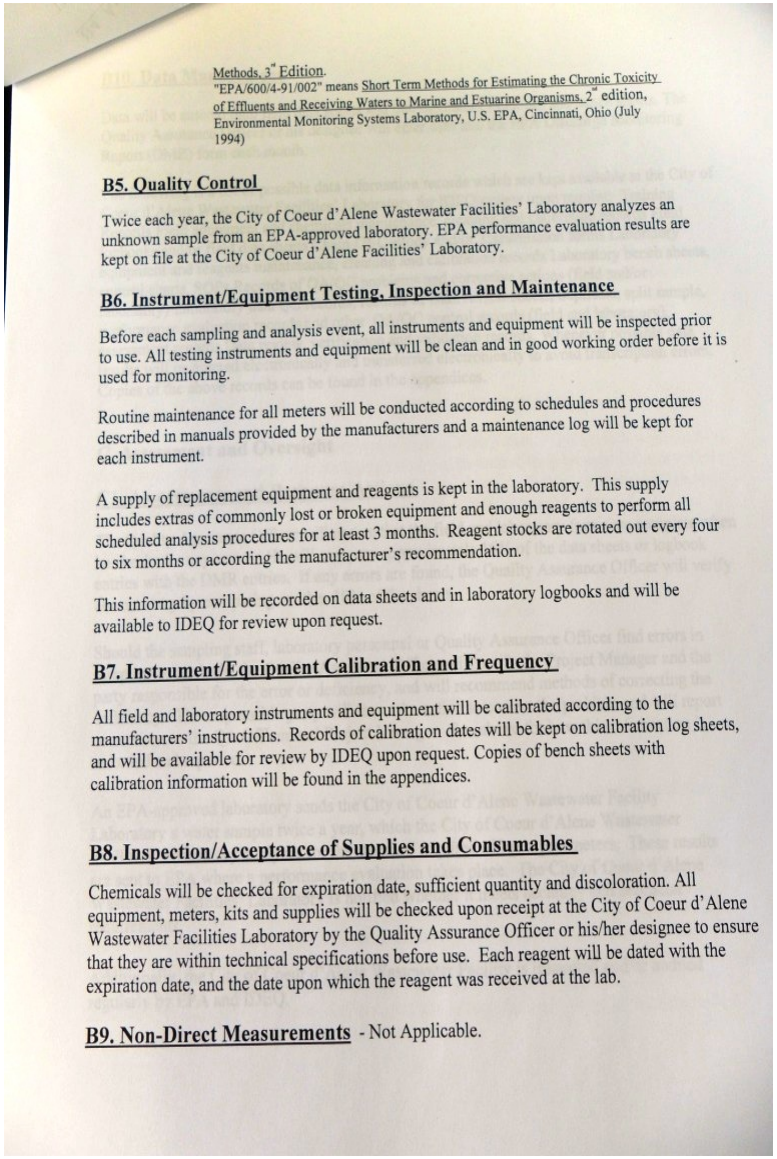
Laboratories contracted by the City of Coeur d'Alene Wastewater Facility will follow test procedures for the analysis of pollutants which are EPA-approved methods as cited in 40 CFR Part 136.3 or as such regulations are amended. Sludge methods are specified in 40 CFR Part 503.8.

Contracted laboratories will provide copies of their Standard Operating Procedures (SOPs) to IDEQ as requested. As previously stated, IDEQ drinking-water certified laboratory QMPs are kept on file at the office of the IDEQ Water Quality Assurance Officer. Parameters, approved methods, Precision and Accuracy values are shown below in **Table 3**.

Footnotes: 1. "SM18" means Standard Methods for Examination of Water and Wastewater, 19th Edition, 1995.
"EPA" means Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79 020, March 1983.
"EPA SW-846" means Test Methods for Evaluating Solid Waste, Physical/Chemical

Parameter	Approved Test Procedures[1]	Precision (RPD)	Accuracy (% R)
Alkalinity	EPA 310.1	<20	80 - 120
BOD_5	SM18 5210B	<30	80 - 120
COD	HACH 8000	<20	90 - 110
Cyanide	SM 4500-CN-B	<20	90 - 110
NITRATE	HACH 8171	<20	90 - 110
TSS	SM18 2540 D EPA 160.2	<20	85 - 115
Fecal Coliform Bacteria	SM18 9222 D	NA	NA
pH	EPA 150.1	0. 1 pH units	0. 1 pH units
Ortho Phosphate	QUIK CHEM 10-115-01-1-M	<20	90 - 110
Total Phosphorus	QUIK CHEM 10-115-01-1-R	<20	90 - 110
TKN	QUIK CHEM 10-107-06-2-H	<20	90 – 110
Temperature	EPA 170.1	<10	90 – 110
Total Ammonia	EPA 350.3	<20	90 - 110
Total Chlorine (residual)	HACH DPD 10250	<20	NA
Dissolved Oxygen	EPA 360.1 or SM4500 series	<30	85-115
Total Recoverable Metals (wastewater)	EPA 200 series or SM310 series	See specific metal	See specific metal
Sample Preparation	EPA 200.2	NA	NA
Total Metals (sludge) Sample Preparation	EPA SW-846 3050A	NA	NA
Total Metals (sludge) Arsenic	EPA SW-846 7060	<20	See control chart
Total Metals (sludge) Chromium	EPA SW-846 7190	<20	See control chart
Total Metals (sludge) Nickel	EPA SW-846 7520	<20	See control chart
Whole Effluent Toxicity (WET)	EPA/ 600/4-91/002	<20	>90 (Control survival)

Photograph by David Domingo (EPA) on September 11, 2012 looking at the May 2012 QAP for the onsite laboratory. Note this QAP is based on the 2007 draft permit which has not been finalized.



Methods, 3rd Edition.
"EPA/600/4-91/002" means Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, 2nd edition, Environmental Monitoring Systems Laboratory, U.S. EPA, Cincinnati, Ohio (July 1994)

B5. Quality Control

Twice each year, the City of Coeur d'Alene Wastewater Facilities' Laboratory analyzes an unknown sample from an EPA-approved laboratory. EPA performance evaluation results are kept on file at the City of Coeur d'Alene Facilities' Laboratory.

B6. Instrument/Equipment Testing, Inspection and Maintenance

Before each sampling and analysis event, all instruments and equipment will be inspected prior to use. All testing instruments and equipment will be clean and in good working order before it is used for monitoring.

Routine maintenance for all meters will be conducted according to schedules and procedures described in manuals provided by the manufacturers and a maintenance log will be kept for each instrument.

A supply of replacement equipment and reagents is kept in the laboratory. This supply includes extras of commonly lost or broken equipment and enough reagents to perform all scheduled analysis procedures for at least 3 months. Reagent stocks are rotated out every four to six months or according the manufacturer's recommendation.

This information will be recorded on data sheets and in laboratory logbooks and will be available to IDEQ for review upon request.

B7. Instrument/Equipment Calibration and Frequency

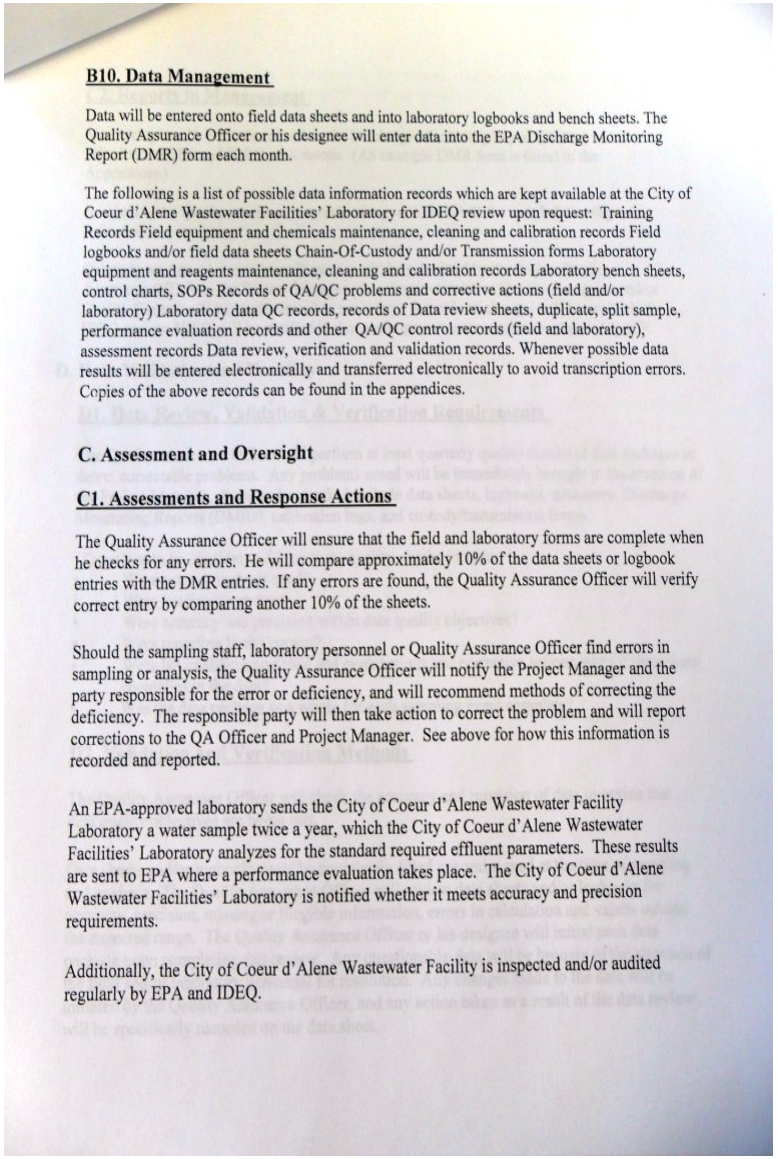
All field and laboratory instruments and equipment will be calibrated according to the manufacturers' instructions. Records of calibration dates will be kept on calibration log sheets, and will be available for review by IDEQ upon request. Copies of bench sheets with calibration information will be found in the appendices.

B8. Inspection/Acceptance of Supplies and Consumables

Chemicals will be checked for expiration date, sufficient quantity and discoloration. All equipment, meters, kits and supplies will be checked upon receipt at the City of Coeur d'Alene Wastewater Facilities Laboratory by the Quality Assurance Officer or his/her designee to ensure that they are within technical specifications before use. Each reagent will be dated with the expiration date, and the date upon which the reagent was received at the lab.

B9. Non-Direct Measurements - Not Applicable.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the May 2012 QAP for the onsite laboratory. Note this QAP is based on the 2007 draft permit which has not been finalized.



B10. Data Management

Data will be entered onto field data sheets and into laboratory logbooks and bench sheets. The Quality Assurance Officer or his designee will enter data into the EPA Discharge Monitoring Report (DMR) form each month.

The following is a list of possible data information records which are kept available at the City of Coeur d'Alene Wastewater Facilities' Laboratory for IDEQ review upon request: Training Records Field equipment and chemicals maintenance, cleaning and calibration records Field logbooks and/or field data sheets Chain-Of-Custody and/or Transmission forms Laboratory equipment and reagents maintenance, cleaning and calibration records Laboratory bench sheets, control charts, SOPs Records of QA/QC problems and corrective actions (field and/or laboratory) Laboratory data QC records, records of Data review sheets, duplicate, split sample, performance evaluation records and other QA/QC control records (field and laboratory), assessment records Data review, verification and validation records. Whenever possible data results will be entered electronically and transferred electronically to avoid transcription errors. Copies of the above records can be found in the appendices.

C. Assessment and Oversight

C1. Assessments and Response Actions

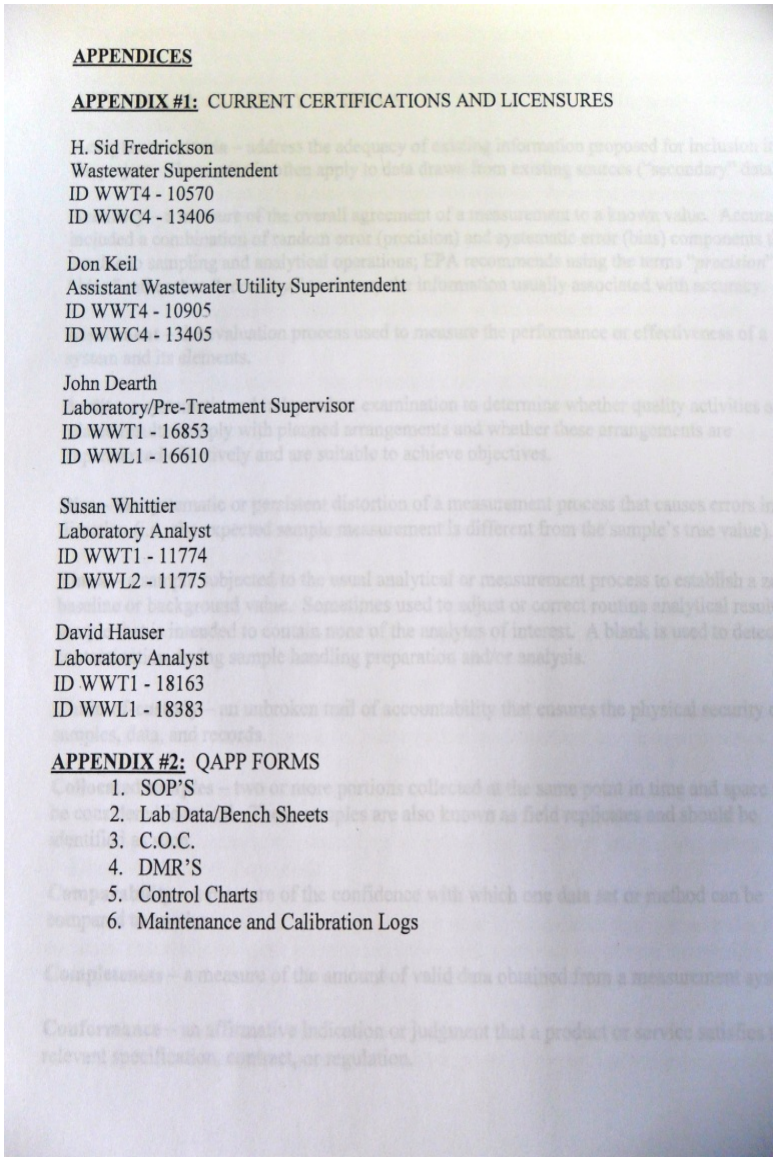
The Quality Assurance Officer will ensure that the field and laboratory forms are complete when he checks for any errors. He will compare approximately 10% of the data sheets or logbook entries with the DMR entries. If any errors are found, the Quality Assurance Officer will verify correct entry by comparing another 10% of the sheets.

Should the sampling staff, laboratory personnel or Quality Assurance Officer find errors in sampling or analysis, the Quality Assurance Officer will notify the Project Manager and the party responsible for the error or deficiency, and will recommend methods of correcting the deficiency. The responsible party will then take action to correct the problem and will report corrections to the QA Officer and Project Manager. See above for how this information is recorded and reported.

An EPA-approved laboratory sends the City of Coeur d'Alene Wastewater Facility Laboratory a water sample twice a year, which the City of Coeur d'Alene Wastewater Facilities' Laboratory analyzes for the standard required effluent parameters. These results are sent to EPA where a performance evaluation takes place. The City of Coeur d'Alene Wastewater Facilities' Laboratory is notified whether it meets accuracy and precision requirements.

Additionally, the City of Coeur d'Alene Wastewater Facility is inspected and/or audited regularly by EPA and IDEQ.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the May 2012 QAP for the onsite laboratory. Note this QAP is based on the 2007 draft permit which has not been finalized.



APPENDICES

APPENDIX #1: CURRENT CERTIFICATIONS AND LICENSURES

H. Sid Fredrickson
Wastewater Superintendent
ID WWT4 - 10570
ID WWC4 - 13406

Don Keil
Assistant Wastewater Utility Superintendent
ID WWT4 - 10905
ID WWC4 - 13405

John Dearth
Laboratory/Pre-Treatment Supervisor
ID WWT1 - 16853
ID WWL1 - 16610

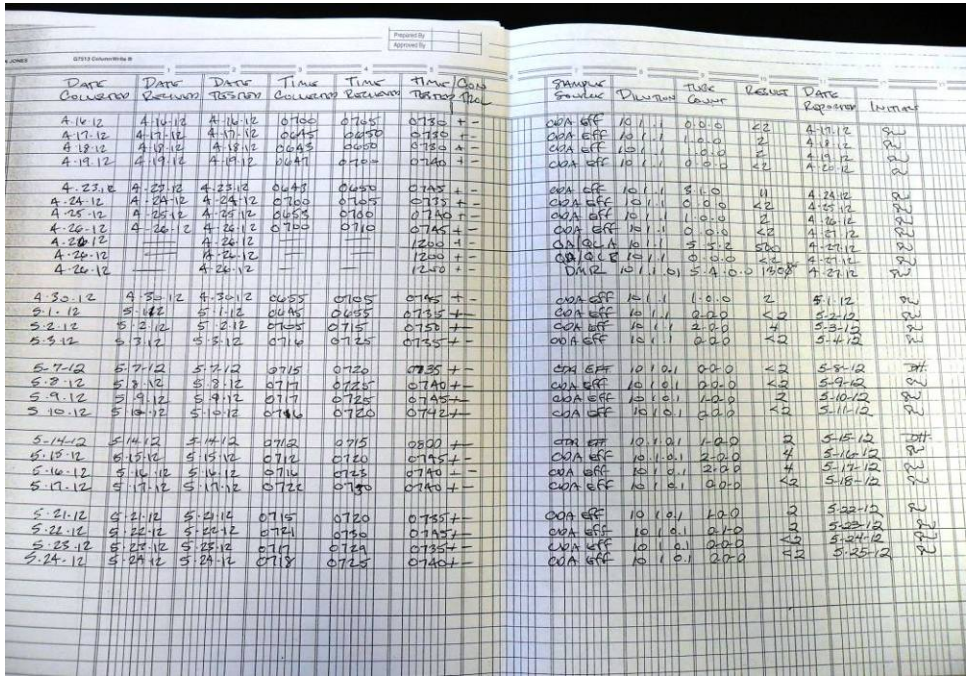
Susan Whittier
Laboratory Analyst
ID WWT1 - 11774
ID WWL2 - 11775

David Hauser
Laboratory Analyst
ID WWT1 - 18163
ID WWL1 - 18383

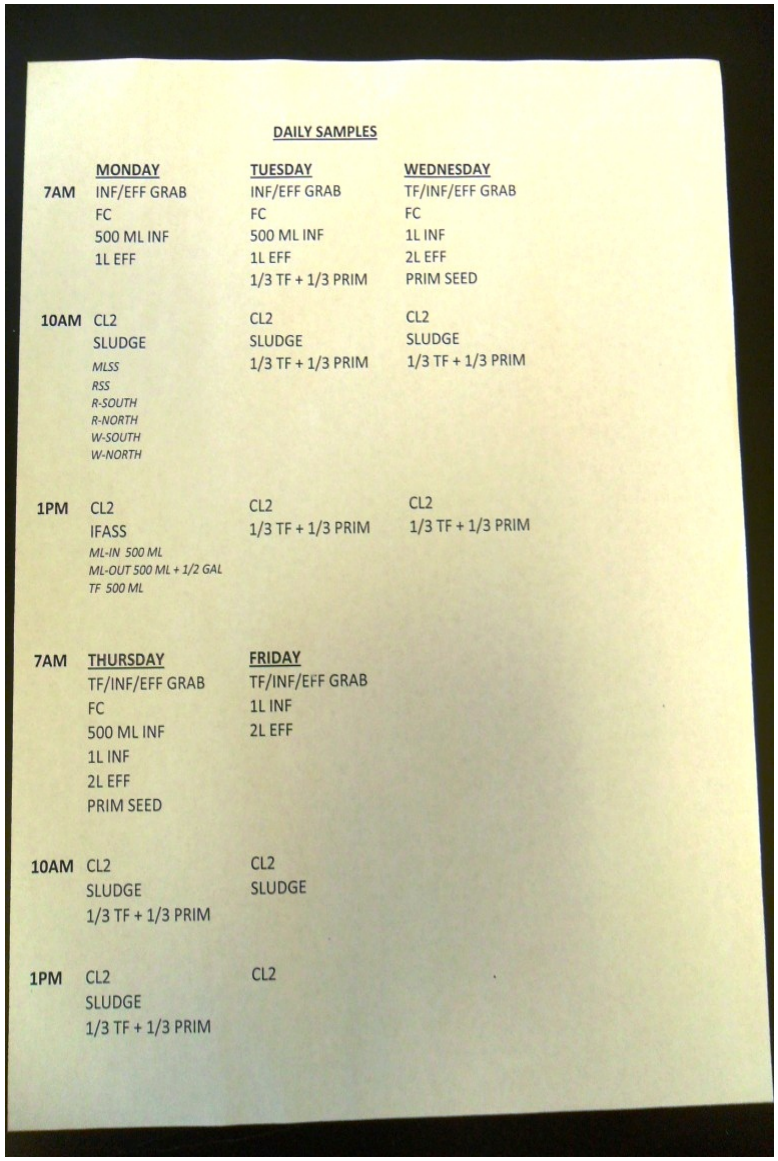
APPENDIX #2: QAPP FORMS

1. SOP'S
2. Lab Data/Bench Sheets
3. C.O.C.
4. DMR'S
5. Control Charts
6. Maintenance and Calibration Logs

Photograph by David Domingo (EPA) on September 11, 2012 looking at the May 2012 QAP for the onsite laboratory. Note this QAP is based on the 2007 draft permit which has not been finalized.



Photograph by David Domingo (EPA) on September 11, 2012 looking at the laboratory benchsheet for fecal coliform analysis. Note the date, time and initials of individuals as specified in Part IV.F (Records Contents) of the Permit.

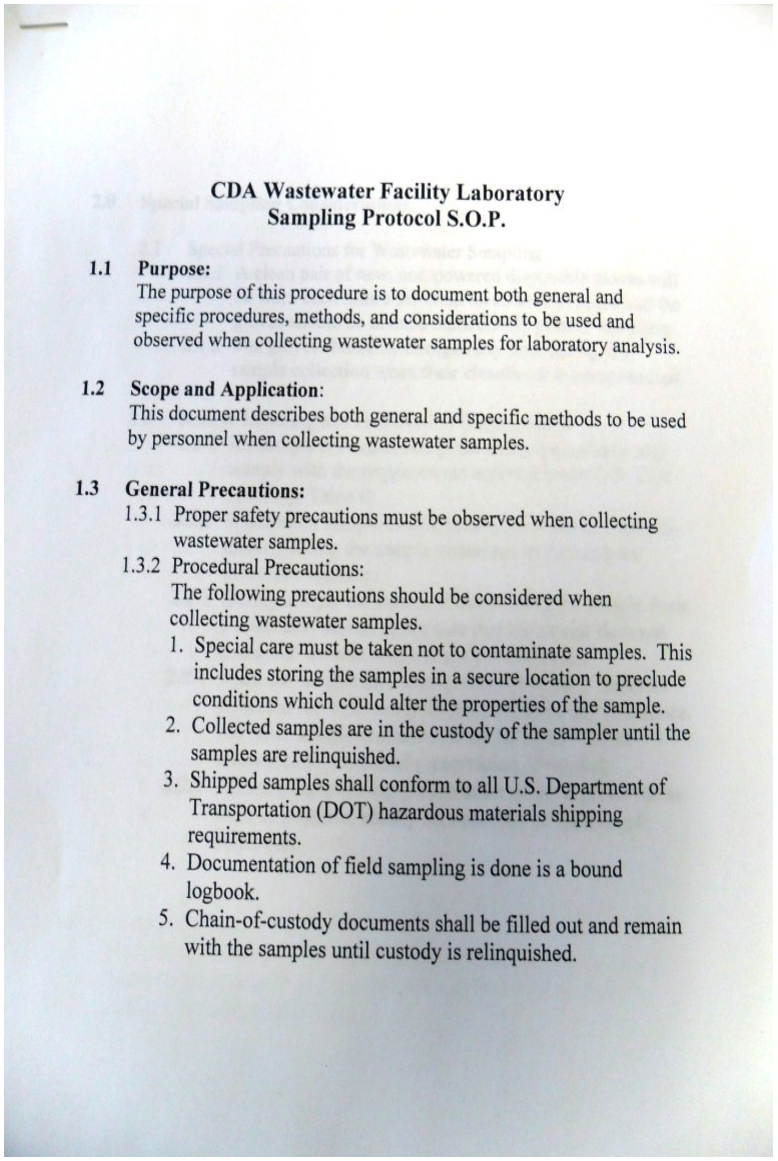


DAILY SAMPLES

	MONDAY	TUESDAY	WEDNESDAY
7AM	INF/EFF GRAB FC 500 ML INF 1L EFF	INF/EFF GRAB FC 500 ML INF 1L EFF 1/3 TF + 1/3 PRIM	TF/INF/EFF GRAB FC 1L INF 2L EFF PRIM SEED
10AM	CL2 SLUDGE *MLSS* *RSS* *R-SOUTH* *R-NORTH* *W-SOUTH* *W-NORTH*	CL2 SLUDGE 1/3 TF + 1/3 PRIM	CL2 SLUDGE 1/3 TF + 1/3 PRIM
1PM	CL2 IFASS *ML-IN 500 ML* *ML-OUT 500 ML + 1/2 GAL* *TF 500 ML*	CL2 1/3 TF + 1/3 PRIM	CL2 1/3 TF + 1/3 PRIM

	THURSDAY	FRIDAY
7AM	TF/INF/EFF GRAB FC 500 ML INF 1L INF 2L EFF PRIM SEED	TF/INF/EFF GRAB 1L INF 2L EFF
10AM	CL2 SLUDGE 1/3 TF + 1/3 PRIM	CL2 SLUDGE
1PM	CL2 SLUDGE 1/3 TF + 1/3 PRIM	CL2

Photograph by David Domingo (EPA) on September 11, 2012 looking at the standard operating procedures for sampling protocols.



CDA Wastewater Facility Laboratory
Sampling Protocol S.O.P.

1.1 Purpose:
The purpose of this procedure is to document both general and specific procedures, methods, and considerations to be used and observed when collecting wastewater samples for laboratory analysis.

1.2 Scope and Application:
This document describes both general and specific methods to be used by personnel when collecting wastewater samples.

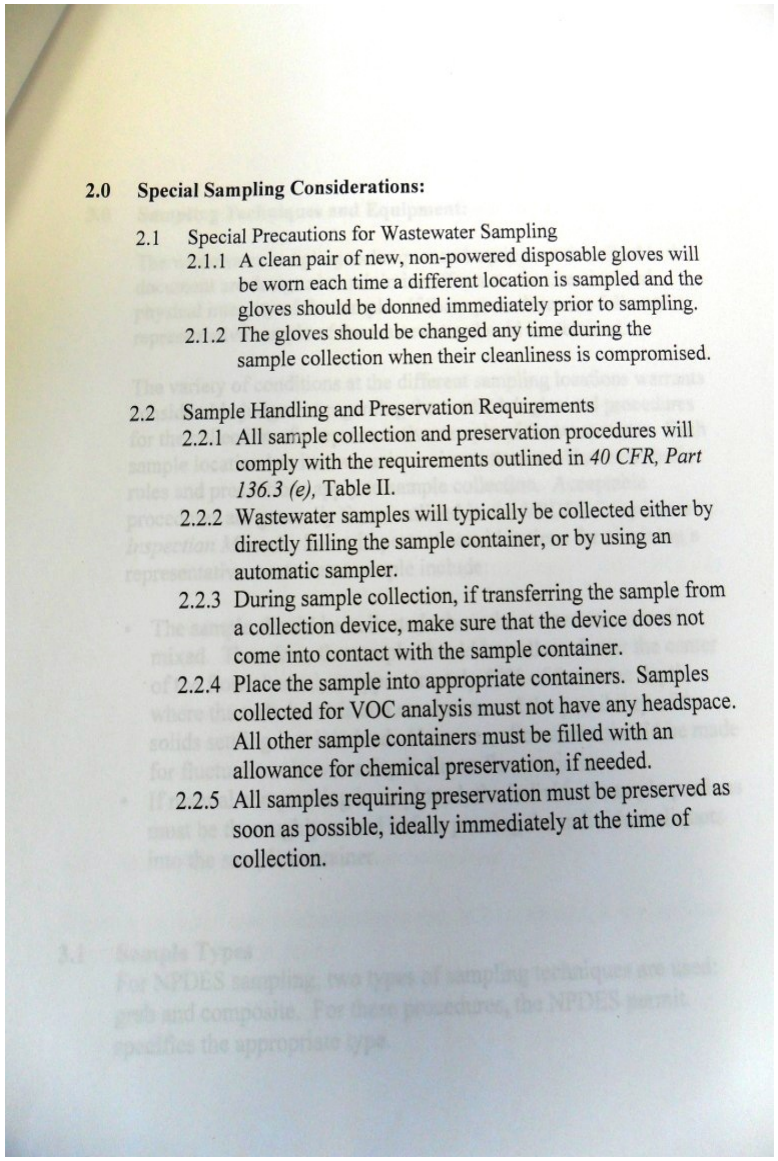
1.3 General Precautions:

1.3.1 Proper safety precautions must be observed when collecting wastewater samples.

1.3.2 Procedural Precautions:
The following precautions should be considered when collecting wastewater samples.

1. Special care must be taken not to contaminate samples. This includes storing the samples in a secure location to preclude conditions which could alter the properties of the sample.
2. Collected samples are in the custody of the sampler until the samples are relinquished.
3. Shipped samples shall conform to all U.S. Department of Transportation (DOT) hazardous materials shipping requirements.
4. Documentation of field sampling is done is a bound logbook.
5. Chain-of-custody documents shall be filled out and remain with the samples until custody is relinquished.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the standard operating procedures for sampling protocols.



2.0 Special Sampling Considerations:

2.1 Special Precautions for Wastewater Sampling

2.1.1 A clean pair of new, non-powered disposable gloves will be worn each time a different location is sampled and the gloves should be donned immediately prior to sampling.

2.1.2 The gloves should be changed any time during the sample collection when their cleanliness is compromised.

2.2 Sample Handling and Preservation Requirements

2.2.1 All sample collection and preservation procedures will comply with the requirements outlined in *40 CFR, Part 136.3 (e),* Table II.

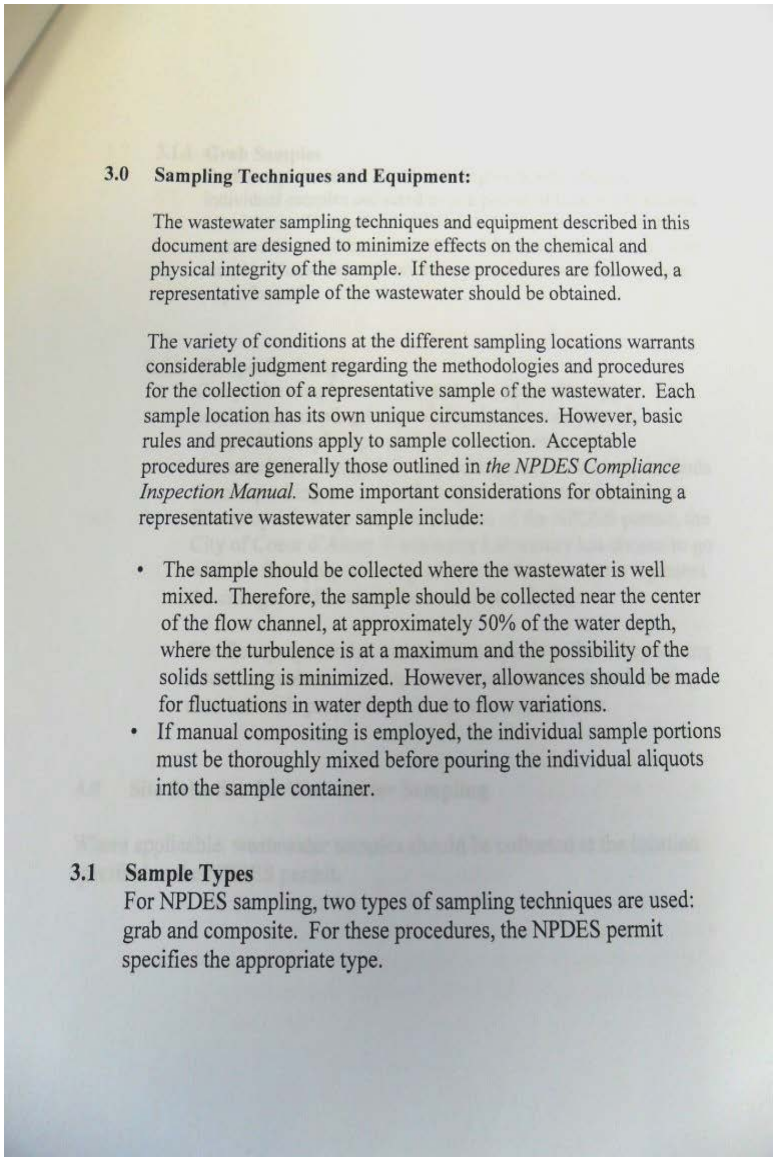
2.2.2 Wastewater samples will typically be collected either by directly filling the sample container, or by using an automatic sampler.

2.2.3 During sample collection, if transferring the sample from a collection device, make sure that the device does not come into contact with the sample container.

2.2.4 Place the sample into appropriate containers. Samples collected for VOC analysis must not have any headspace. All other sample containers must be filled with an allowance for chemical preservation, if needed.

2.2.5 All samples requiring preservation must be preserved as soon as possible, ideally immediately at the time of collection.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the standard operating procedures for sampling protocols.



3.0 Sampling Techniques and Equipment:

The wastewater sampling techniques and equipment described in this document are designed to minimize effects on the chemical and physical integrity of the sample. If these procedures are followed, a representative sample of the wastewater should be obtained.

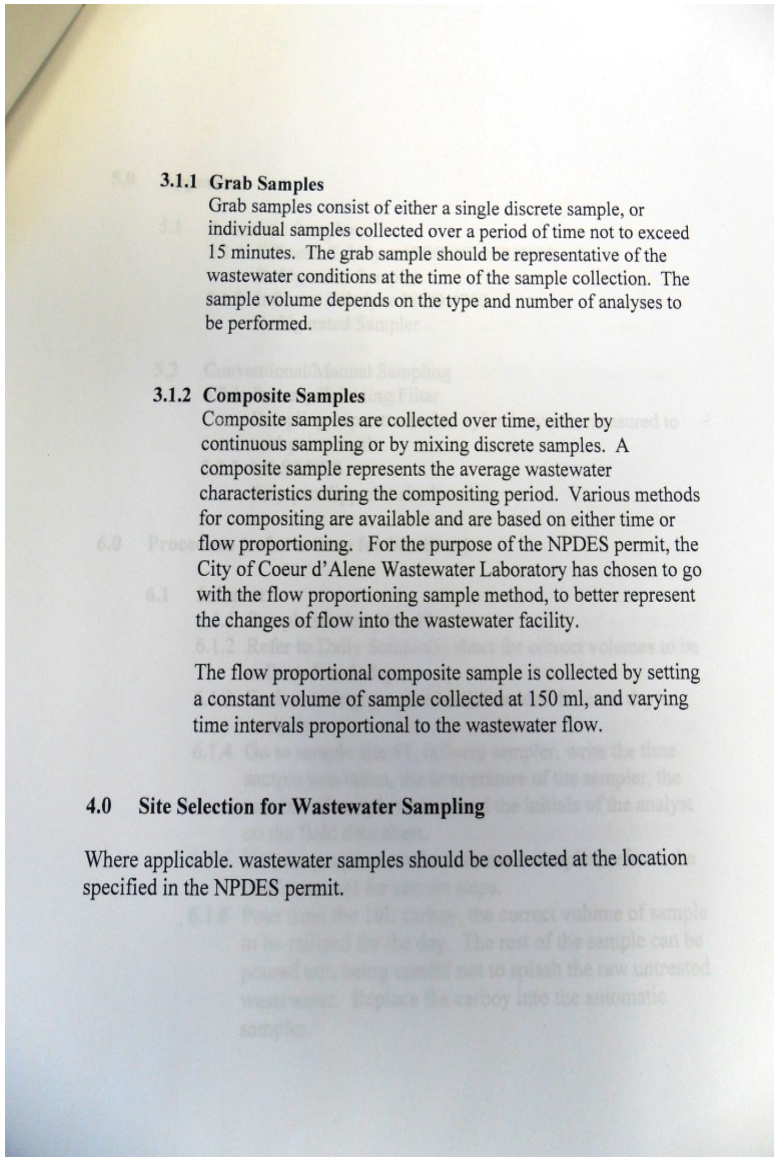
The variety of conditions at the different sampling locations warrants considerable judgment regarding the methodologies and procedures for the collection of a representative sample of the wastewater. Each sample location has its own unique circumstances. However, basic rules and precautions apply to sample collection. Acceptable procedures are generally those outlined in *the NPDES Compliance Inspection Manual.* Some important considerations for obtaining a representative wastewater sample include:

- The sample should be collected where the wastewater is well mixed. Therefore, the sample should be collected near the center of the flow channel, at approximately 50% of the water depth, where the turbulence is at a maximum and the possibility of the solids settling is minimized. However, allowances should be made for fluctuations in water depth due to flow variations.
- If manual compositing is employed, the individual sample portions must be thoroughly mixed before pouring the individual aliquots into the sample container.

3.1 Sample Types

For NPDES sampling, two types of sampling techniques are used: grab and composite. For these procedures, the NPDES permit specifies the appropriate type.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the standard operating procedures for sampling protocols.



3.1.1 Grab Samples

Grab samples consist of either a single discrete sample, or individual samples collected over a period of time not to exceed 15 minutes. The grab sample should be representative of the wastewater conditions at the time of the sample collection. The sample volume depends on the type and number of analyses to be performed.

3.1.2 Composite Samples

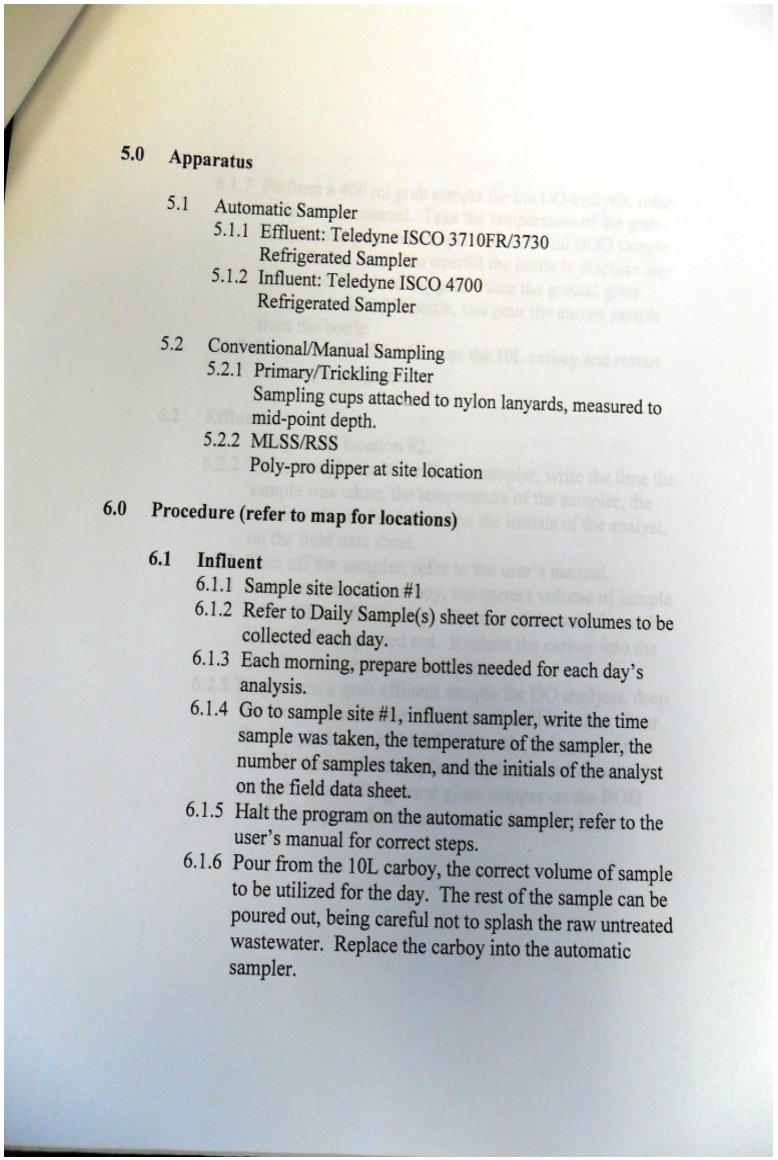
Composite samples are collected over time, either by continuous sampling or by mixing discrete samples. A composite sample represents the average wastewater characteristics during the compositing period. Various methods for compositing are available and are based on either time or flow proportioning. For the purpose of the NPDES permit, the City of Coeur d'Alene Wastewater Laboratory has chosen to go with the flow proportioning sample method, to better represent the changes of flow into the wastewater facility.

The flow proportional composite sample is collected by setting a constant volume of sample collected at 150 ml, and varying time intervals proportional to the wastewater flow.

4.0 Site Selection for Wastewater Sampling

Where applicable. wastewater samples should be collected at the location specified in the NPDES permit.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the standard operating procedures for sampling protocols.



5.0 Apparatus

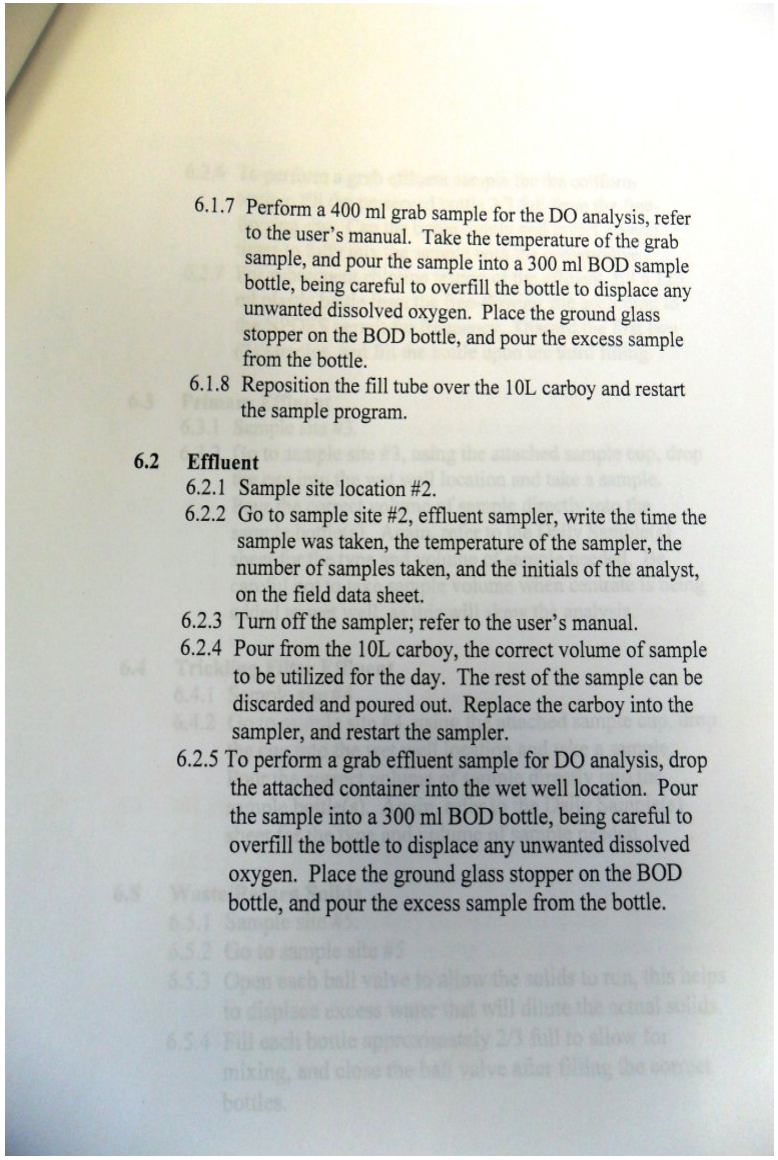
5.1 Automatic Sampler
- 5.1.1 Effluent: Teledyne ISCO 3710FR/3730 Refrigerated Sampler
- 5.1.2 Influent: Teledyne ISCO 4700 Refrigerated Sampler

5.2 Conventional/Manual Sampling
- 5.2.1 Primary/Trickling Filter
  Sampling cups attached to nylon lanyards, measured to mid-point depth.
- 5.2.2 MLSS/RSS
  Poly-pro dipper at site location

6.0 Procedure (refer to map for locations)

6.1 Influent
- 6.1.1 Sample site location #1
- 6.1.2 Refer to Daily Sample(s) sheet for correct volumes to be collected each day.
- 6.1.3 Each morning, prepare bottles needed for each day's analysis.
- 6.1.4 Go to sample site #1, influent sampler, write the time sample was taken, the temperature of the sampler, the number of samples taken, and the initials of the analyst on the field data sheet.
- 6.1.5 Halt the program on the automatic sampler; refer to the user's manual for correct steps.
- 6.1.6 Pour from the 10L carboy, the correct volume of sample to be utilized for the day. The rest of the sample can be poured out, being careful not to splash the raw untreated wastewater. Replace the carboy into the automatic sampler.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the standard operating procedures for sampling protocols.



6.1.7 Perform a 400 ml grab sample for the DO analysis, refer to the user's manual. Take the temperature of the grab sample, and pour the sample into a 300 ml BOD sample bottle, being careful to overfill the bottle to displace any unwanted dissolved oxygen. Place the ground glass stopper on the BOD bottle, and pour the excess sample from the bottle.

6.1.8 Reposition the fill tube over the 10L carboy and restart the sample program.

6.2 Effluent

6.2.1 Sample site location #2.

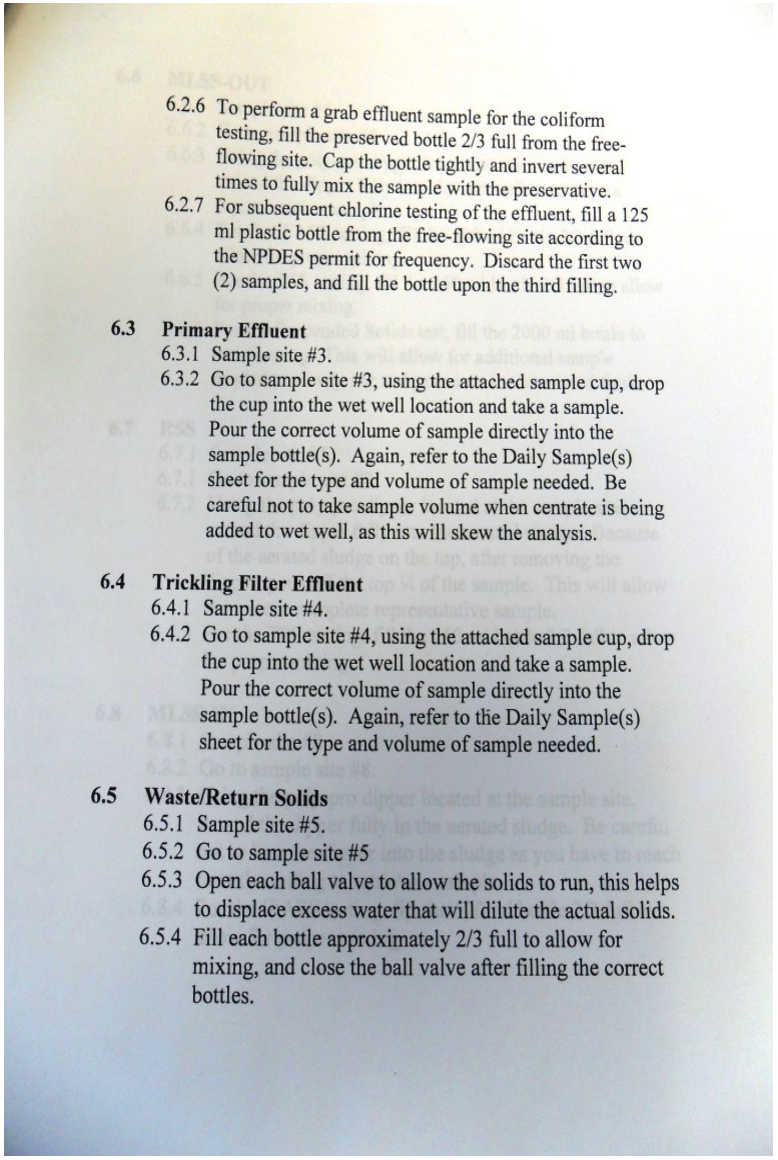
6.2.2 Go to sample site #2, effluent sampler, write the time the sample was taken, the temperature of the sampler, the number of samples taken, and the initials of the analyst, on the field data sheet.

6.2.3 Turn off the sampler; refer to the user's manual.

6.2.4 Pour from the 10L carboy, the correct volume of sample to be utilized for the day. The rest of the sample can be discarded and poured out. Replace the carboy into the sampler, and restart the sampler.

6.2.5 To perform a grab effluent sample for DO analysis, drop the attached container into the wet well location. Pour the sample into a 300 ml BOD bottle, being careful to overfill the bottle to displace any unwanted dissolved oxygen. Place the ground glass stopper on the BOD bottle, and pour the excess sample from the bottle.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the standard operating procedures for sampling protocols.



6.2.6 To perform a grab effluent sample for the coliform testing, fill the preserved bottle 2/3 full from the free-flowing site. Cap the bottle tightly and invert several times to fully mix the sample with the preservative.

6.2.7 For subsequent chlorine testing of the effluent, fill a 125 ml plastic bottle from the free-flowing site according to the NPDES permit for frequency. Discard the first two (2) samples, and fill the bottle upon the third filling.

6.3 Primary Effluent

6.3.1 Sample site #3.

6.3.2 Go to sample site #3, using the attached sample cup, drop the cup into the wet well location and take a sample. Pour the correct volume of sample directly into the sample bottle(s). Again, refer to the Daily Sample(s) sheet for the type and volume of sample needed. Be careful not to take sample volume when centrate is being added to wet well, as this will skew the analysis.

6.4 Trickling Filter Effluent

6.4.1 Sample site #4.

6.4.2 Go to sample site #4, using the attached sample cup, drop the cup into the wet well location and take a sample. Pour the correct volume of sample directly into the sample bottle(s). Again, refer to the Daily Sample(s) sheet for the type and volume of sample needed.

6.5 Waste/Return Solids

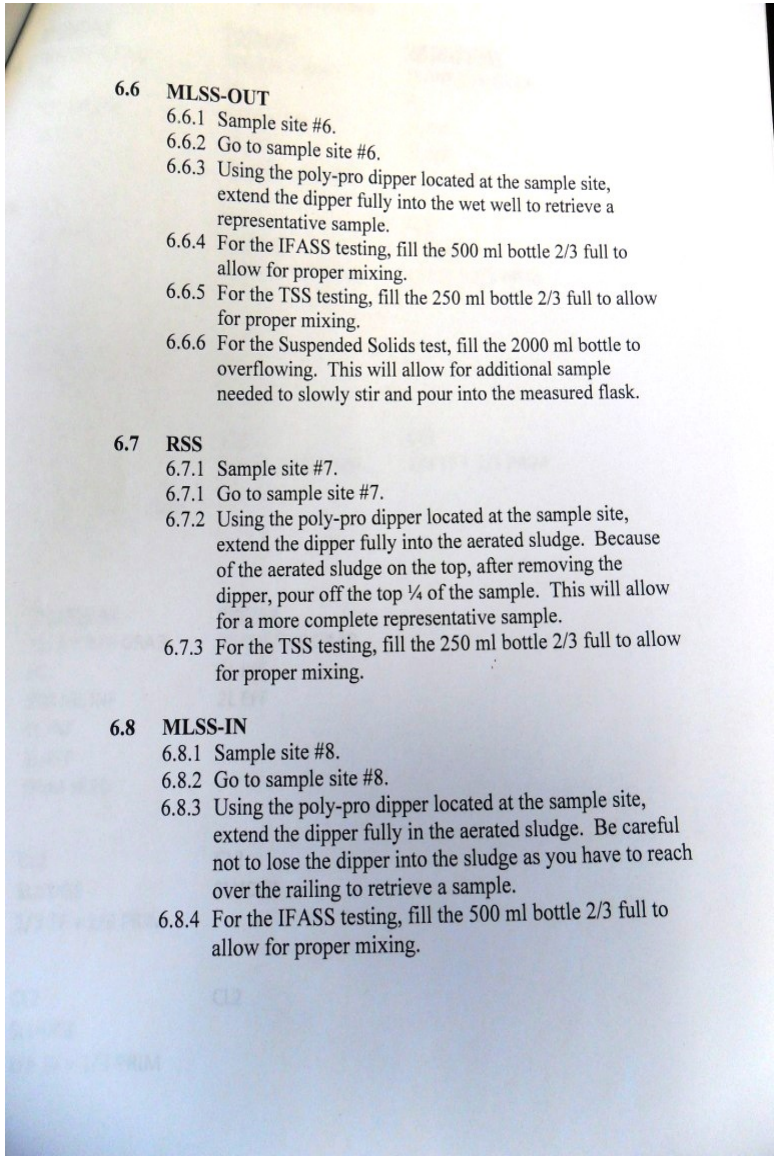
6.5.1 Sample site #5.

6.5.2 Go to sample site #5

6.5.3 Open each ball valve to allow the solids to run, this helps to displace excess water that will dilute the actual solids.

6.5.4 Fill each bottle approximately 2/3 full to allow for mixing, and close the ball valve after filling the correct bottles.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the standard operating procedures for sampling protocols.



6.6 MLSS-OUT

6.6.1 Sample site #6.
6.6.2 Go to sample site #6.
6.6.3 Using the poly-pro dipper located at the sample site, extend the dipper fully into the wet well to retrieve a representative sample.
6.6.4 For the IFASS testing, fill the 500 ml bottle 2/3 full to allow for proper mixing.
6.6.5 For the TSS testing, fill the 250 ml bottle 2/3 full to allow for proper mixing.
6.6.6 For the Suspended Solids test, fill the 2000 ml bottle to overflowing. This will allow for additional sample needed to slowly stir and pour into the measured flask.

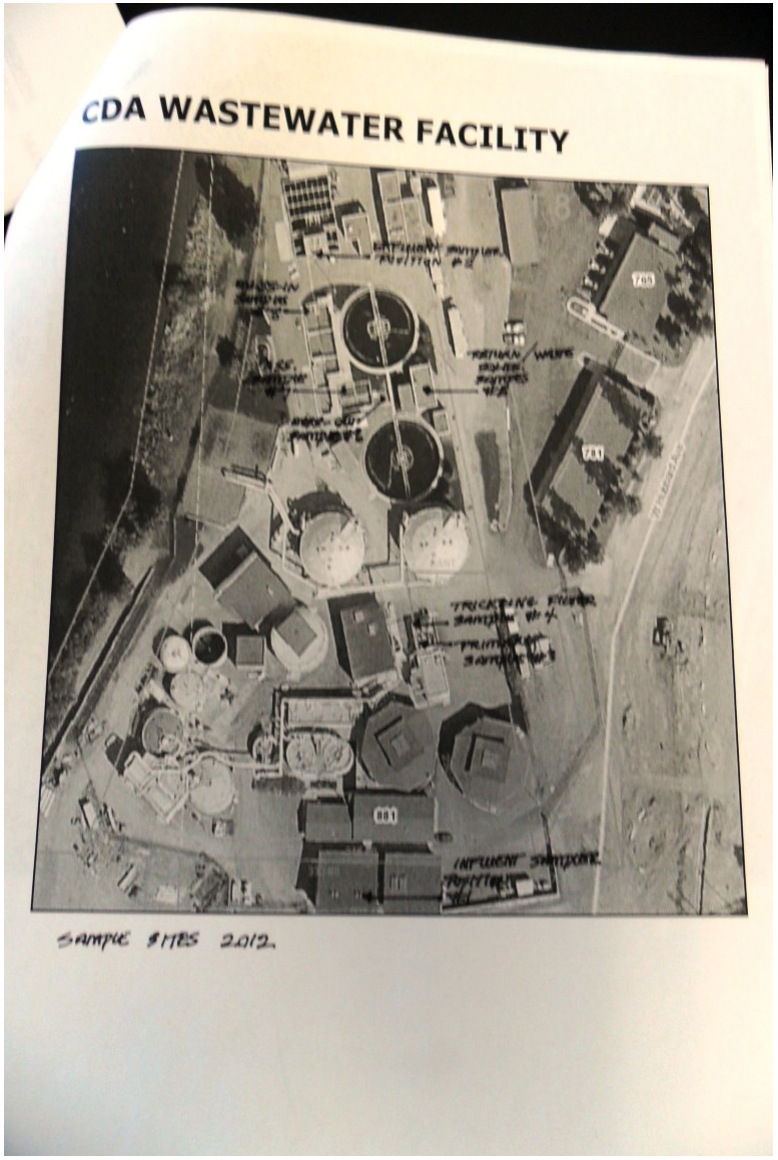
6.7 RSS

6.7.1 Sample site #7.
6.7.1 Go to sample site #7.
6.7.2 Using the poly-pro dipper located at the sample site, extend the dipper fully into the aerated sludge. Because of the aerated sludge on the top, after removing the dipper, pour off the top ¼ of the sample. This will allow for a more complete representative sample.
6.7.3 For the TSS testing, fill the 250 ml bottle 2/3 full to allow for proper mixing.

6.8 MLSS-IN

6.8.1 Sample site #8.
6.8.2 Go to sample site #8.
6.8.3 Using the poly-pro dipper located at the sample site, extend the dipper fully in the aerated sludge. Be careful not to lose the dipper into the sludge as you have to reach over the railing to retrieve a sample.
6.8.4 For the IFASS testing, fill the 500 ml bottle 2/3 full to allow for proper mixing.

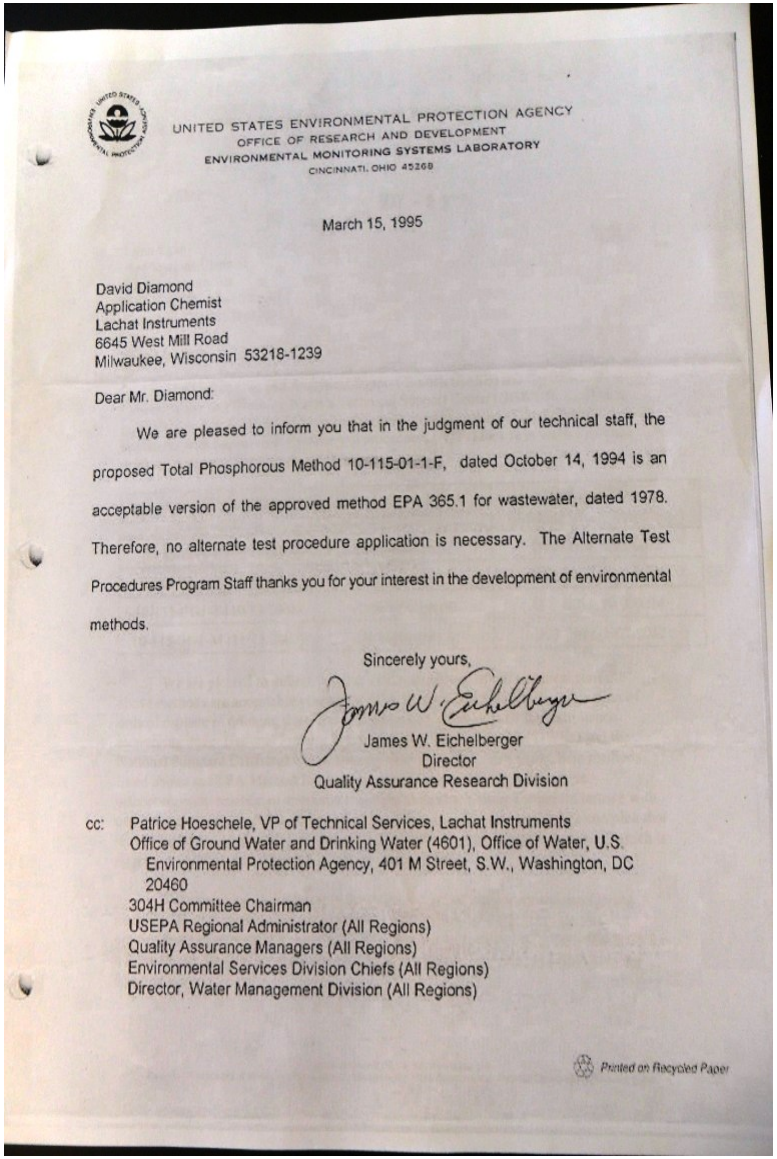
Photograph by David Domingo (EPA) on September 11, 2012 looking at the standard operating procedures for sampling protocols.



Photograph by David Domingo (EPA) on September 11, 2012 looking at the map of sampling locations in the standard operating procedures for sampling protocols.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the map of sampling locations in the standard operating procedures. for sampling protocols.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the map of sampling locations in the standard operating procedures for sampling protocols.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF RESEARCH AND DEVELOPMENT
ENVIRONMENTAL MONITORING SYSTEMS LABORATORY
CINCINNATI, OHIO 45268

March 15, 1995

David Diamond
Application Chemist
Lachat Instruments
6645 West Mill Road
Milwaukee, Wisconsin 53218-1239

Dear Mr. Diamond:

We are pleased to inform you that in the judgment of our technical staff, the proposed Total Phosphorous Method 10-115-01-1-F, dated October 14, 1994 is an acceptable version of the approved method EPA 365.1 for wastewater, dated 1978. Therefore, no alternate test procedure application is necessary. The Alternate Test Procedures Program Staff thanks you for your interest in the development of environmental methods.

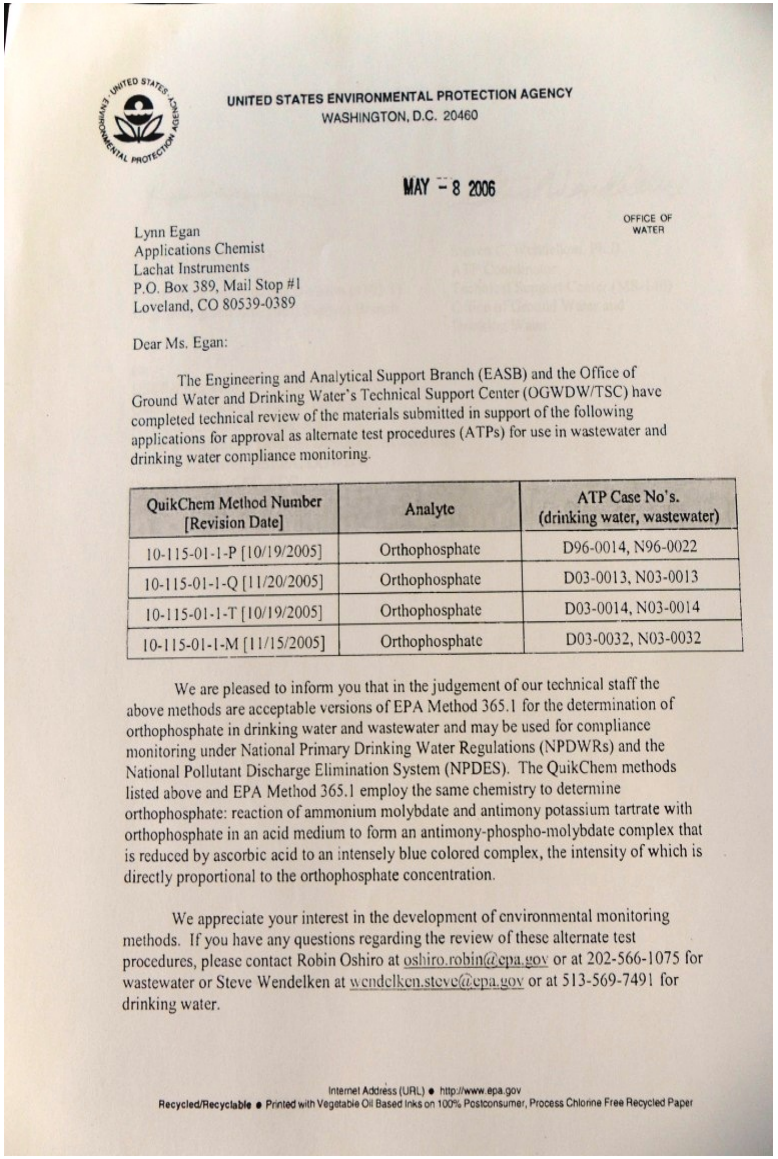
Sincerely yours,

James W. Eichelberger
Director
Quality Assurance Research Division

cc: Patrice Hoeschele, VP of Technical Services, Lachat Instruments
Office of Ground Water and Drinking Water (4601), Office of Water, U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460
304H Committee Chairman
USEPA Regional Administrator (All Regions)
Quality Assurance Managers (All Regions)
Environmental Services Division Chiefs (All Regions)
Director, Water Management Division (All Regions)

Printed on Recycled Paper

Photograph by David Domingo (EPA) on September 11, 2012 looking at the approval for using an acceptable version of EPA approved method for total phosphorus.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY - 8 2006

OFFICE OF WATER

Lynn Egan
Applications Chemist
Lachat Instruments
P.O. Box 389, Mail Stop #1
Loveland, CO 80539-0389

Dear Ms. Egan:

The Engineering and Analytical Support Branch (EASB) and the Office of Ground Water and Drinking Water's Technical Support Center (OGWDW/TSC) have completed technical review of the materials submitted in support of the following applications for approval as alternate test procedures (ATPs) for use in wastewater and drinking water compliance monitoring.

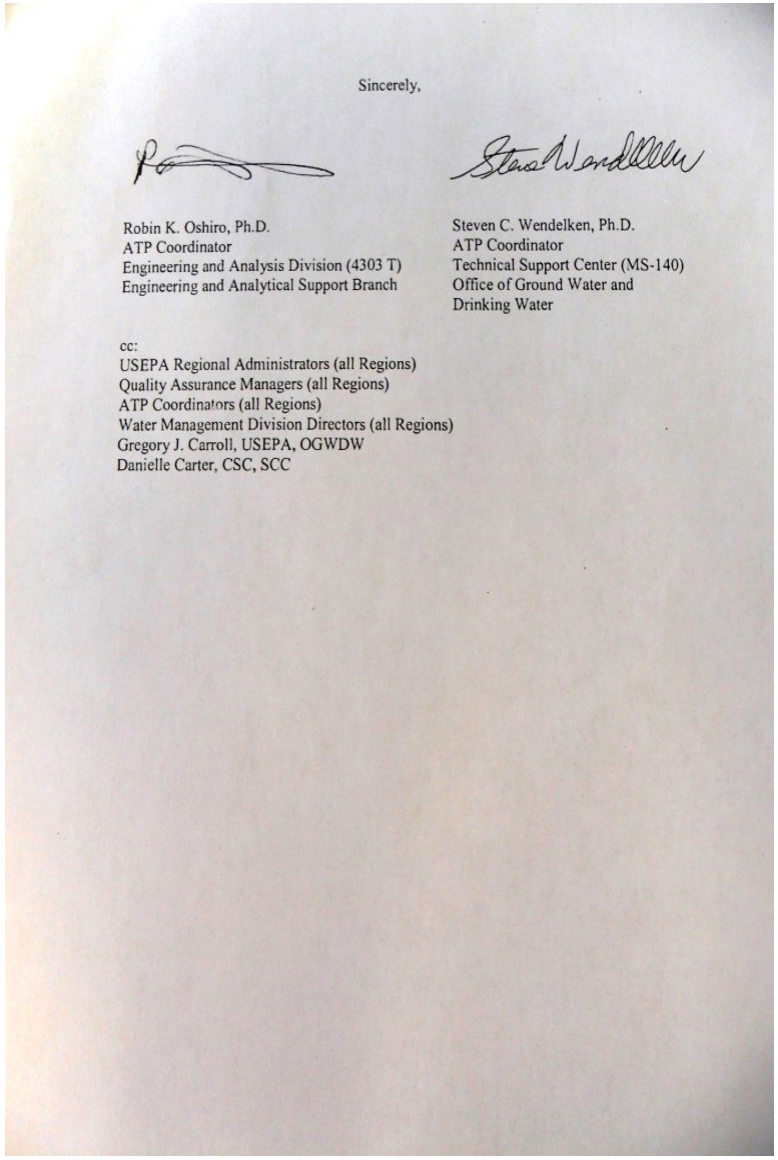
QuikChem Method Number [Revision Date]	Analyte	ATP Case No's. (drinking water, wastewater)
10-115-01-1-P [10/19/2005]	Orthophosphate	D96-0014, N96-0022
10-115-01-1-Q [11/20/2005]	Orthophosphate	D03-0013, N03-0013
10-115-01-1-T [10/19/2005]	Orthophosphate	D03-0014, N03-0014
10-115-01-1-M [11/15/2005]	Orthophosphate	D03-0032, N03-0032

We are pleased to inform you that in the judgement of our technical staff the above methods are acceptable versions of EPA Method 365.1 for the determination of orthophosphate in drinking water and wastewater and may be used for compliance monitoring under National Primary Drinking Water Regulations (NPDWRs) and the National Pollutant Discharge Elimination System (NPDES). The QuikChem methods listed above and EPA Method 365.1 employ the same chemistry to determine orthophosphate: reaction of ammonium molybdate and antimony potassium tartrate with orthophosphate in an acid medium to form an antimony-phospho-molybdate complex that is reduced by ascorbic acid to an intensely blue colored complex, the intensity of which is directly proportional to the orthophosphate concentration.

We appreciate your interest in the development of environmental monitoring methods. If you have any questions regarding the review of these alternate test procedures, please contact Robin Oshiro at oshiro.robin@epa.gov or at 202-566-1075 for wastewater or Steve Wendelken at wendelken.steve@epa.gov or at 513-569-7491 for drinking water.

Internet Address (URL) • http://www.epa.gov
Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Postconsumer, Process Chlorine Free Recycled Paper

Photograph by David Domingo (EPA) on September 11, 2012 looking at the approval for using an acceptable version of EPA approved method for orthophosphate.



Sincerely,

Robin K. Oshiro, Ph.D.
ATP Coordinator
Engineering and Analysis Division (4303 T)
Engineering and Analytical Support Branch

Steven C. Wendelken, Ph.D.
ATP Coordinator
Technical Support Center (MS-140)
Office of Ground Water and
Drinking Water

cc:
USEPA Regional Administrators (all Regions)
Quality Assurance Managers (all Regions)
ATP Coordinators (all Regions)
Water Management Division Directors (all Regions)
Gregory J. Carroll, USEPA, OGWDW
Danielle Carter, CSC, SCC

Photograph by David Domingo (EPA) on September 11, 2012 looking at the approval for using an acceptable version of EPA approved method for orthophosphate.

CERTIFICATE OF RECOGNITION

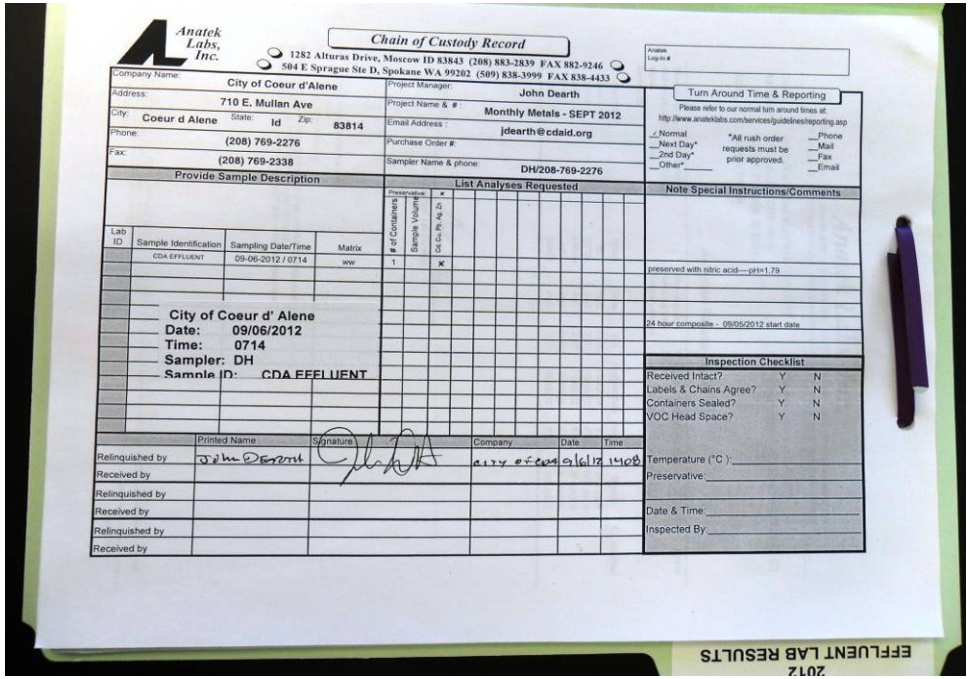
ERA congratulates
COEUR D' ALENE WWTP
for your participation and successful evaluation in DMR-QA 32. We recognize the performance of this laboratory for achieving acceptable evaluations for the following analytes.

Ammonia as N	Non-Filterable Residue (TSS)	Total Residual Chlorine
CBOD	pH	
Fecal Coliforms (MPN)	Total phosphorus as P	

Jay R. McBurney
Quality Program Manager

C471901

Photograph by David Domingo (EPA) on September 11, 2012 looking at the certification for acceptable results in the DMRQA Study 32 for the onsite laboratory.



Anatek Labs, Inc.

Chain of Custody Record

1282 Alturas Drive, Moscow ID 83843 (208) 883-2839 FAX 882-9246
504 E Sprague Ste D, Spokane WA 99202 (509) 838-3999 FAX 838-4433

Company Name: City of Coeur d'Alene
Address: 710 E. Mullan Ave
City: Coeur d Alene State: Id Zip: 83814
Phone: (208) 769-2276
Fax: (208) 769-2338

Project Manager: John Dearth
Project Name & # : Monthly Metals - SEPT 2012
Email Address : jdearth@cdaid.org
Purchase Order #:
Sampler Name & phone: DH/208-769-2276

Turn Around Time & Reporting
Please refer to our normal turn around times at: http://www.anateklabs.com/services/guidelines/reporting.asp
✓ Normal __Next Day* __2nd Day* __Other*____
*All rush order requests must be prior approved.
__Phone __Mail __Fax __Email

Provide Sample Description

List Analyses Requested

Note Special Instructions/Comments

Lab ID	Sample Identification	Sampling Date/Time	Matrix	# of Containers	Sample Volume	Preservative	Cd, Cu, Pb, Ag, Zn
	CDA EFFLUENT	09-06-2012 / 0714	ww	1		✓	

preserved with nitric acid—pH=1.79

24 hour composite - 09/05/2012 start date

City of Coeur d' Alene
Date: 09/06/2012
Time: 0714
Sampler: DH
Sample ID: CDA EFFLUENT

Inspection Checklist

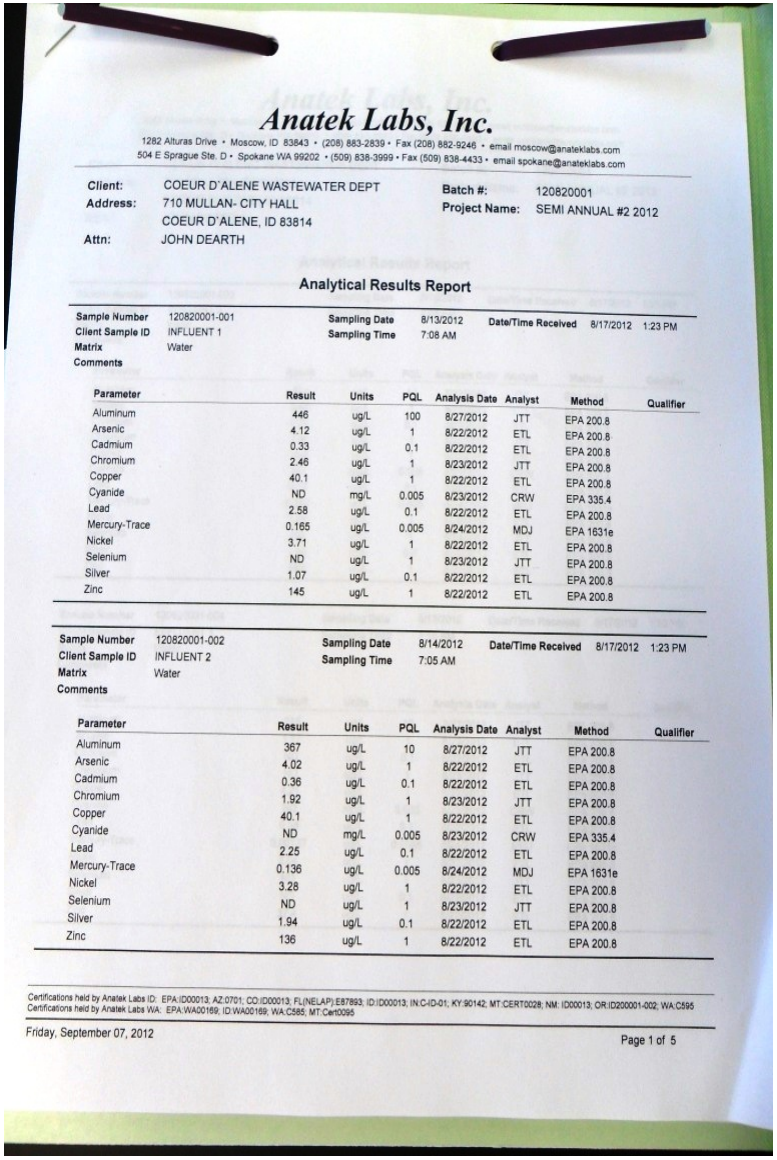
Received Intact?	Y	N
Labels & Chains Agree?	Y	N
Containers Sealed?	Y	N
VOC Head Space?	Y	N

Temperature (°C):
Preservative:
Date & Time:
Inspected By:

	Printed Name	Signature	Company	Date	Time
Relinquished by	John Dearth		City of CdA	9/6/12	1408
Received by					
Relinquished by					
Received by					
Relinquished by					
Received by					

EFFLUENT LAB RESULTS 2012

Photograph by David Domingo (EPA) on September 11, 2012 looking at the chain of custody form for samples collected on September 6, 2012. Note the sample preserved with nitric acid to pH of 1.79 standard units (su).



Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: COEUR D'ALENE WASTEWATER DEPT
Address: 710 MULLAN- CITY HALL
COEUR D'ALENE, ID 83814
Attn: JOHN DEARTH

Batch #: 120820001
Project Name: SEMI ANNUAL #2 2012

Analytical Results Report

Sample Number 120820001-001
Client Sample ID INFLUENT 1
Matrix Water
Comments
Sampling Date 8/13/2012
Sampling Time 7:08 AM
Date/Time Received 8/17/2012 1:23 PM

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Aluminum	446	ug/L	100	8/27/2012	JTT	EPA 200.8	
Arsenic	4.12	ug/L	1	8/22/2012	ETL	EPA 200.8	
Cadmium	0.33	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Chromium	2.46	ug/L	1	8/23/2012	JTT	EPA 200.8	
Copper	40.1	ug/L	1	8/22/2012	ETL	EPA 200.8	
Cyanide	ND	mg/L	0.005	8/23/2012	CRW	EPA 335.4	
Lead	2.58	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Mercury-Trace	0.165	ug/L	0.005	8/24/2012	MDJ	EPA 1631e	
Nickel	3.71	ug/L	1	8/22/2012	ETL	EPA 200.8	
Selenium	ND	ug/L	1	8/23/2012	JTT	EPA 200.8	
Silver	1.07	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Zinc	145	ug/L	1	8/22/2012	ETL	EPA 200.8	

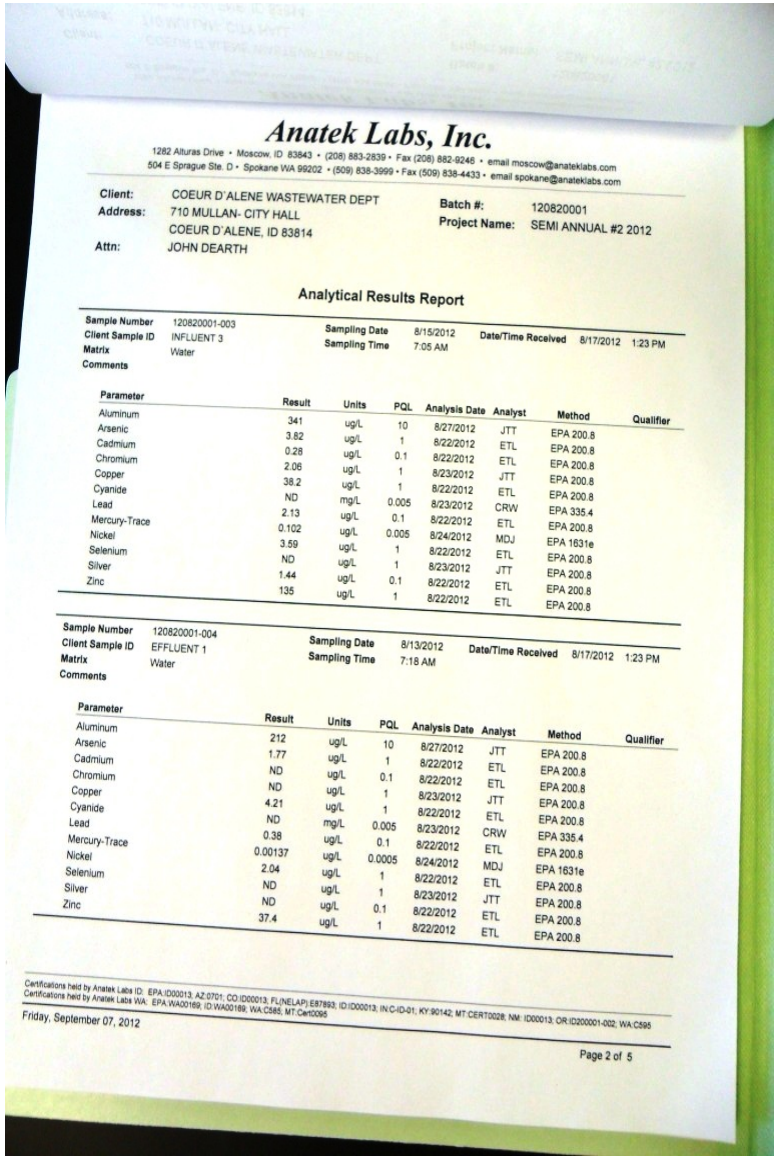
Sample Number 120820001-002
Client Sample ID INFLUENT 2
Matrix Water
Comments
Sampling Date 8/14/2012
Sampling Time 7:05 AM
Date/Time Received 8/17/2012 1:23 PM

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Aluminum	367	ug/L	10	8/27/2012	JTT	EPA 200.8	
Arsenic	4.02	ug/L	1	8/22/2012	ETL	EPA 200.8	
Cadmium	0.36	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Chromium	1.92	ug/L	1	8/23/2012	JTT	EPA 200.8	
Copper	40.1	ug/L	1	8/22/2012	ETL	EPA 200.8	
Cyanide	ND	mg/L	0.005	8/23/2012	CRW	EPA 335.4	
Lead	2.25	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Mercury-Trace	0.136	ug/L	0.005	8/24/2012	MDJ	EPA 1631e	
Nickel	3.28	ug/L	1	8/22/2012	ETL	EPA 200.8	
Selenium	ND	ug/L	1	8/23/2012	JTT	EPA 200.8	
Silver	1.94	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Zinc	136	ug/L	1	8/22/2012	ETL	EPA 200.8	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Friday, September 07, 2012 Page 1 of 5

Photograph by David Domingo (EPA) on September 11, 2012 looking at the certificate of analysis for influent samples collected on August 13 and 14, 2012.



Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: COEUR D'ALENE WASTEWATER DEPT
Address: 710 MULLAN- CITY HALL
COEUR D'ALENE, ID 83814
Attn: JOHN DEARTH

Batch #: 120820001
Project Name: SEMI ANNUAL #2 2012

Analytical Results Report

Sample Number 120820001-003 **Sampling Date** 8/15/2012 **Date/Time Received** 8/17/2012 1:23 PM
Client Sample ID INFLUENT 3 **Sampling Time** 7:05 AM
Matrix Water
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Aluminum	341	ug/L	10	8/27/2012	JTT	EPA 200.8	
Arsenic	3.82	ug/L	1	8/22/2012	ETL	EPA 200.8	
Cadmium	0.28	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Chromium	2.06	ug/L	1	8/23/2012	JTT	EPA 200.8	
Copper	38.2	ug/L	1	8/22/2012	ETL	EPA 200.8	
Cyanide	ND	mg/L	0.005	8/23/2012	CRW	EPA 335.4	
Lead	2.13	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Mercury-Trace	0.102	ug/L	0.005	8/24/2012	MDJ	EPA 1631e	
Nickel	3.59	ug/L	1	8/22/2012	ETL	EPA 200.8	
Selenium	ND	ug/L	1	8/23/2012	JTT	EPA 200.8	
Silver	1.44	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Zinc	135	ug/L	1	8/22/2012	ETL	EPA 200.8	

Sample Number 120820001-004 **Sampling Date** 8/13/2012 **Date/Time Received** 8/17/2012 1:23 PM
Client Sample ID EFFLUENT 1 **Sampling Time** 7:18 AM
Matrix Water
Comments

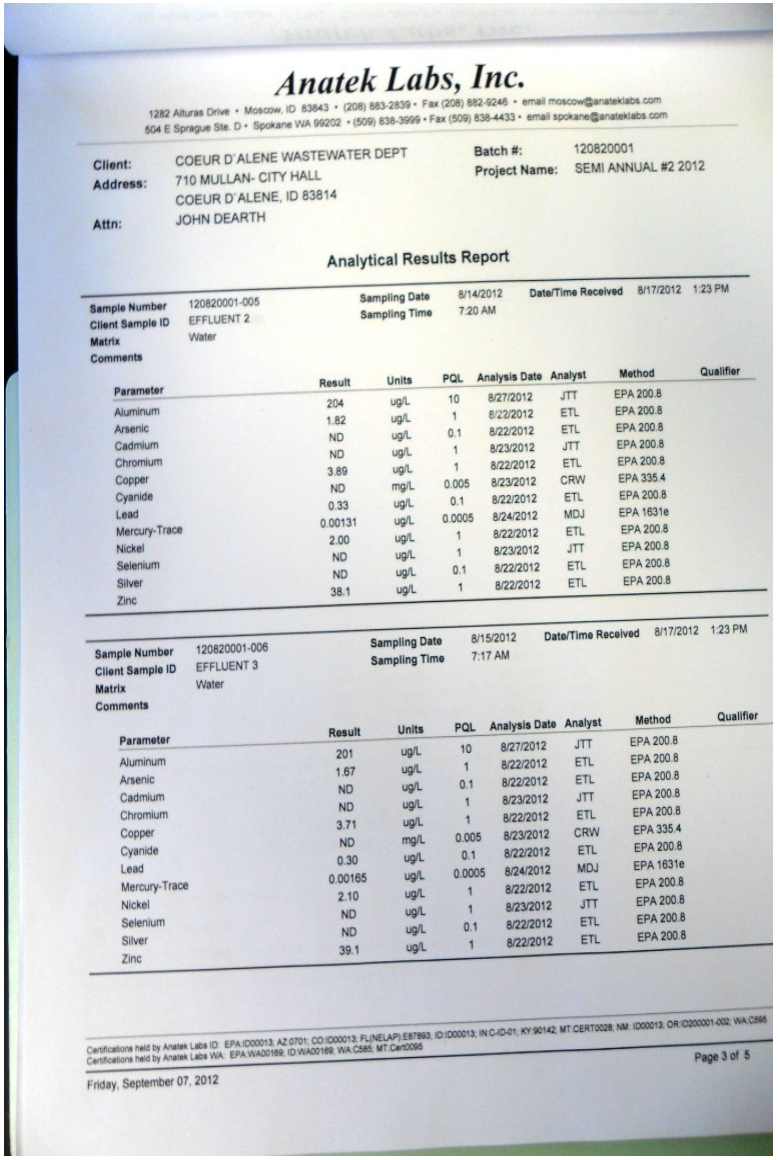
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Aluminum	212	ug/L	10	8/27/2012	JTT	EPA 200.8	
Arsenic	1.77	ug/L	1	8/22/2012	ETL	EPA 200.8	
Cadmium	ND	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Chromium	ND	ug/L	1	8/23/2012	JTT	EPA 200.8	
Copper	4.21	ug/L	1	8/22/2012	ETL	EPA 200.8	
Cyanide	ND	mg/L	0.005	8/23/2012	CRW	EPA 335.4	
Lead	0.38	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Mercury-Trace	0.00137	ug/L	0.0005	8/24/2012	MDJ	EPA 1631e	
Nickel	2.04	ug/L	1	8/22/2012	ETL	EPA 200.8	
Selenium	ND	ug/L	1	8/23/2012	JTT	EPA 200.8	
Silver	ND	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Zinc	37.4	ug/L	1	8/22/2012	ETL	EPA 200.8	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Friday, September 07, 2012

Page 2 of 5

Photograph by David Domingo (EPA) on September 11, 2012 looking at the certificate of analysis for influent sample collected on August 15, 2012 and effluent sample collected on August 13, 2012.



Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: COEUR D'ALENE WASTEWATER DEPT
Address: 710 MULLAN- CITY HALL
COEUR D'ALENE, ID 83814
Attn: JOHN DEARTH

Batch #: 120820001
Project Name: SEMI ANNUAL #2 2012

Analytical Results Report

Sample Number 120820001-005 **Sampling Date** 8/14/2012 **Date/Time Received** 8/17/2012 1:23 PM
Client Sample ID EFFLUENT 2 **Sampling Time** 7:20 AM
Matrix Water
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Aluminum	204	ug/L	10	8/27/2012	JTT	EPA 200.8	
Arsenic	1.82	ug/L	1	8/22/2012	ETL	EPA 200.8	
Cadmium	ND	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Chromium	ND	ug/L	1	8/23/2012	JTT	EPA 200.8	
Copper	3.89	ug/L	1	8/22/2012	ETL	EPA 200.8	
Cyanide	ND	mg/L	0.005	8/23/2012	CRW	EPA 335.4	
Lead	0.33	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Mercury-Trace	0.00131	ug/L	0.0005	8/24/2012	MDJ	EPA 1631e	
Nickel	2.00	ug/L	1	8/22/2012	ETL	EPA 200.8	
Selenium	ND	ug/L	1	8/23/2012	JTT	EPA 200.8	
Silver	ND	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Zinc	38.1	ug/L	1	8/22/2012	ETL	EPA 200.8	

Sample Number 120820001-006 **Sampling Date** 8/15/2012 **Date/Time Received** 8/17/2012 1:23 PM
Client Sample ID EFFLUENT 3 **Sampling Time** 7:17 AM
Matrix Water
Comments

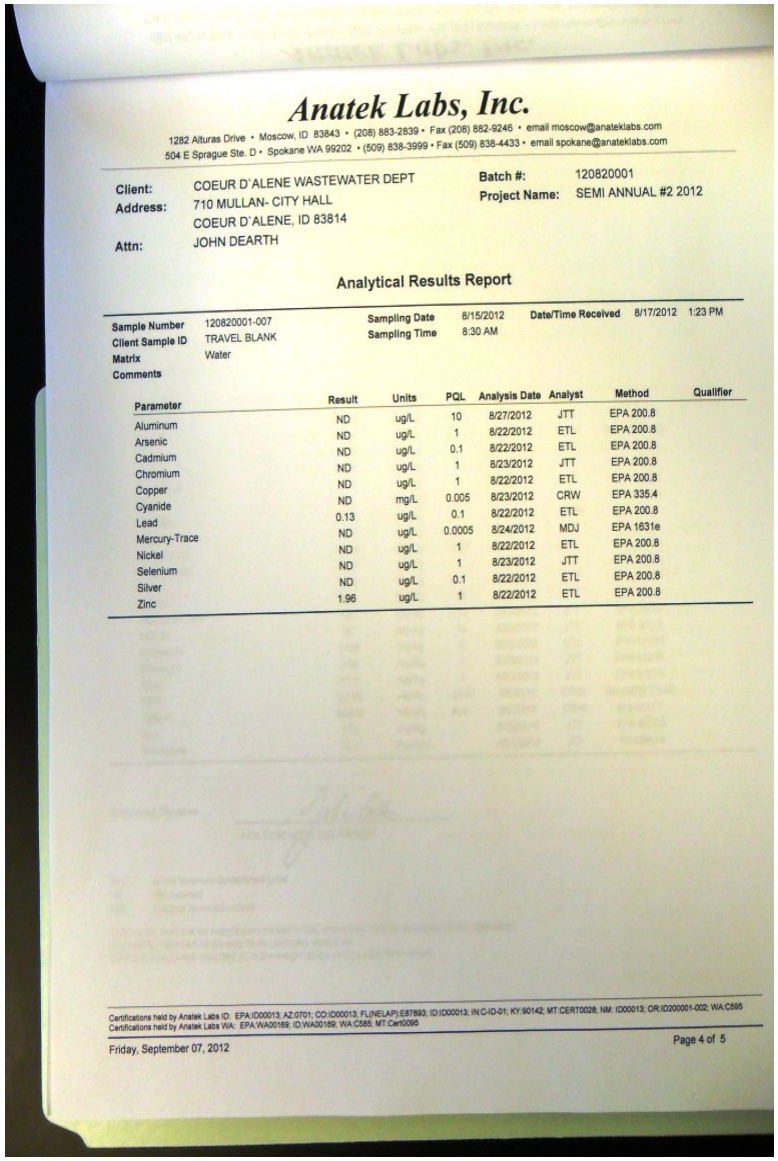
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Aluminum	201	ug/L	10	8/27/2012	JTT	EPA 200.8	
Arsenic	1.67	ug/L	1	8/22/2012	ETL	EPA 200.8	
Cadmium	ND	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Chromium	ND	ug/L	1	8/23/2012	JTT	EPA 200.8	
Copper	3.71	ug/L	1	8/22/2012	ETL	EPA 200.8	
Cyanide	ND	mg/L	0.005	8/23/2012	CRW	EPA 335.4	
Lead	0.30	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Mercury-Trace	0.00165	ug/L	0.0005	8/24/2012	MDJ	EPA 1631e	
Nickel	2.10	ug/L	1	8/22/2012	ETL	EPA 200.8	
Selenium	ND	ug/L	1	8/23/2012	JTT	EPA 200.8	
Silver	ND	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Zinc	39.1	ug/L	1	8/22/2012	ETL	EPA 200.8	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Friday, September 07, 2012

Page 3 of 5

Photograph by David Domingo (EPA) on September 11, 2012 looking at the certificate of analysis for effluent samples collected on August 14 and 15, 2012.



Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: COEUR D`ALENE WASTEWATER DEPT
Address: 710 MULLAN- CITY HALL
COEUR D`ALENE, ID 83814
Attn: JOHN DEARTH

Batch #: 120820001
Project Name: SEMI ANNUAL #2 2012

Analytical Results Report

Sample Number 120820001-007
Client Sample ID TRAVEL BLANK
Matrix Water
Comments

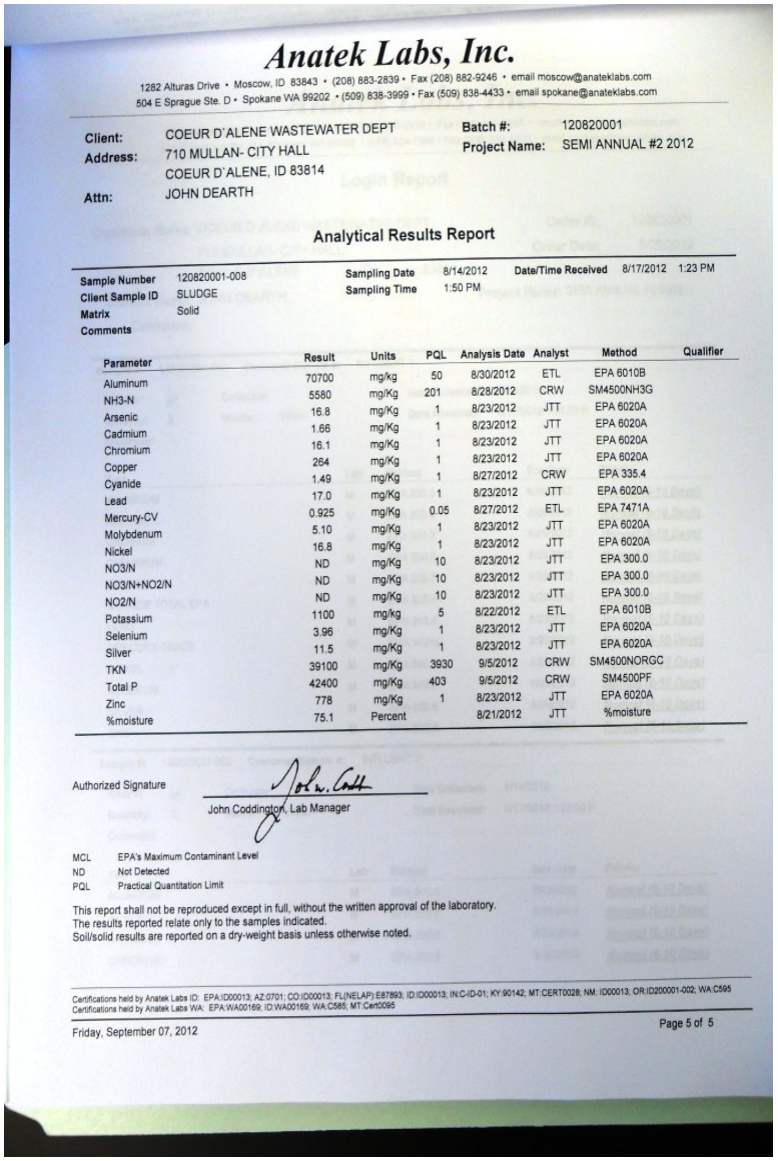
Sampling Date 8/15/2012
Sampling Time 8:30 AM
Date/Time Received 8/17/2012 1:23 PM

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Aluminum	ND	ug/L	10	8/27/2012	JTT	EPA 200.8	
Arsenic	ND	ug/L	1	8/22/2012	ETL	EPA 200.8	
Cadmium	ND	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Chromium	ND	ug/L	1	8/23/2012	JTT	EPA 200.8	
Copper	ND	ug/L	1	8/22/2012	ETL	EPA 200.8	
Cyanide	ND	mg/L	0.005	8/23/2012	CRW	EPA 335.4	
Lead	0.13	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Mercury-Trace	ND	ug/L	0.0005	8/24/2012	MDJ	EPA 1631e	
Nickel	ND	ug/L	1	8/22/2012	ETL	EPA 200.8	
Selenium	ND	ug/L	1	8/23/2012	JTT	EPA 200.8	
Silver	ND	ug/L	0.1	8/22/2012	ETL	EPA 200.8	
Zinc	1.96	ug/L	1	8/22/2012	ETL	EPA 200.8	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Friday, September 07, 2012 Page 4 of 5

Photograph by David Domingo (EPA) on September 11, 2012 looking at the certificate of analysis for the QA/QC "travel blank" collected on August 15, 2012.



Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: COEUR D`ALENE WASTEWATER DEPT
Address: 710 MULLAN- CITY HALL
COEUR D`ALENE, ID 83814
Attn: JOHN DEARTH

Batch #: 120820001
Project Name: SEMI ANNUAL #2 2012

Analytical Results Report

Sample Number 120820001-008
Client Sample ID SLUDGE
Matrix Solid
Comments

Sampling Date 8/14/2012
Sampling Time 1:50 PM
Date/Time Received 8/17/2012 1:23 PM

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Aluminum	70700	mg/Kg	50	8/30/2012	ETL	EPA 6010B	
NH3-N	5580	mg/Kg	201	8/28/2012	CRW	SM4500NH3G	
Arsenic	16.8	mg/Kg	1	8/23/2012	JTT	EPA 6020A	
Cadmium	1.66	mg/Kg	1	8/23/2012	JTT	EPA 6020A	
Chromium	16.1	mg/Kg	1	8/23/2012	JTT	EPA 6020A	
Copper	264	mg/Kg	1	8/23/2012	JTT	EPA 6020A	
Cyanide	1.49	mg/Kg	1	8/27/2012	CRW	EPA 335.4	
Lead	17.0	mg/Kg	1	8/23/2012	JTT	EPA 6020A	
Mercury-CV	0.925	mg/Kg	0.05	8/27/2012	ETL	EPA 7471A	
Molybdenum	5.10	mg/Kg	1	8/23/2012	JTT	EPA 6020A	
Nickel	16.8	mg/Kg	1	8/23/2012	JTT	EPA 6020A	
NO3/N	ND	mg/Kg	10	8/23/2012	JTT	EPA 300.0	
NO3/N+NO2/N	ND	mg/Kg	10	8/23/2012	JTT	EPA 300.0	
NO2/N	ND	mg/Kg	10	8/23/2012	JTT	EPA 300.0	
Potassium	1100	mg/kg	5	8/22/2012	ETL	EPA 6010B	
Selenium	3.96	mg/Kg	1	8/23/2012	JTT	EPA 6020A	
Silver	11.5	mg/Kg	1	8/23/2012	JTT	EPA 6020A	
TKN	39100	mg/Kg	3930	9/5/2012	CRW	SM4500NORGC	
Total P	42400	mg/Kg	403	9/5/2012	CRW	SM4500PF	
Zinc	778	mg/Kg	1	8/23/2012	JTT	EPA 6020A	
%moisture	75.1	Percent		8/21/2012	JTT	%moisture	

Authorized Signature
John Coddington, Lab Manager

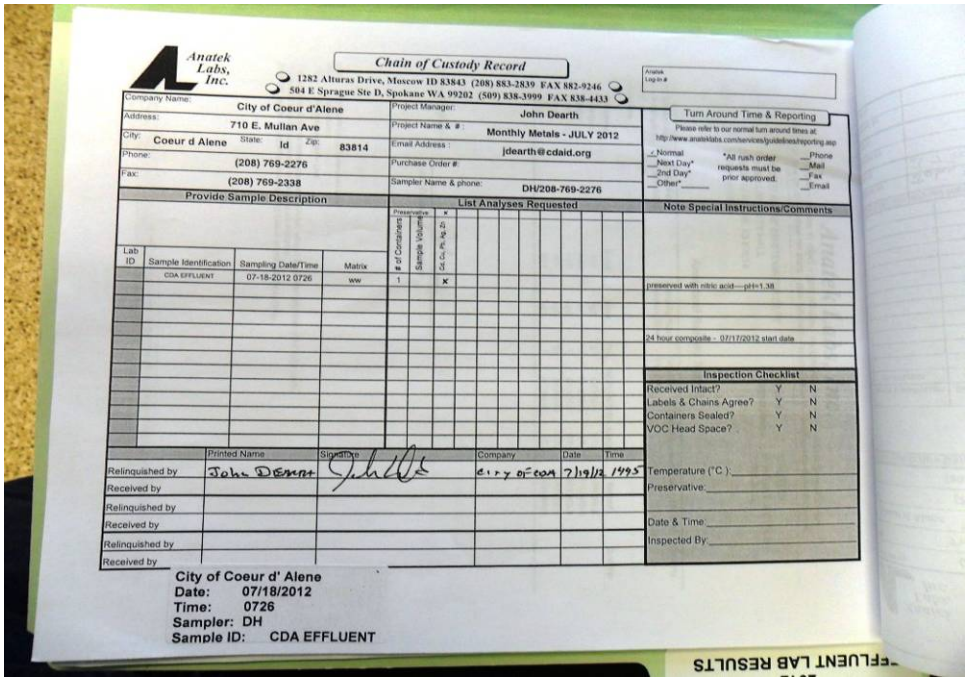
MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Friday, September 07, 2012 Page 5 of 5

Photograph by David Domingo (EPA) on September 11, 2012 looking at the certificate of analysis for sludge sample collected on August 14, 2012.



Anatek Labs, Inc.

Chain of Custody Record

1282 Alturas Drive, Moscow ID 83843 (208) 883-2839 FAX 882-9246
504 E Sprague Ste D, Spokane WA 99202 (509) 838-3999 FAX 838-4433

Company Name: City of Coeur d'Alene
Address: 710 E. Mullan Ave
City: Coeur d Alene State: Id Zip: 83814
Phone: (208) 769-2276
Fax: (208) 769-2338

Project Manager: John Dearth
Project Name & #: Monthly Metals - JULY 2012
Email Address: jdearth@cdaid.org
Purchase Order #:
Sampler Name & phone: DH/208-769-2276

Turn Around Time & Reporting
Please refer to our normal turn around times at: http://www.anateklabs.com/services/guidelines/reporting.asp
✓ Normal
__Next Day*
__2nd Day*
__Other*____
*All rush order requests must be prior approved.
__Phone
__Mail
__Fax
__Email

Provide Sample Description

List Analyses Requested

Note Special Instructions/Comments

Lab ID	Sample Identification	Sampling Date/Time	Matrix	# of Containers	Sample Volume	Pres: Ox, Hc, Ac, Zn
	CDA EFFLUENT	07-18-2012 0726	ww	1		X

preserved with nitric acid—pH=1.38

24 hour composite - 07/17/2012 start date

Inspection Checklist
Received Intact? Y N
Labels & Chains Agree? Y N
Containers Sealed? Y N
VOC Head Space? Y N

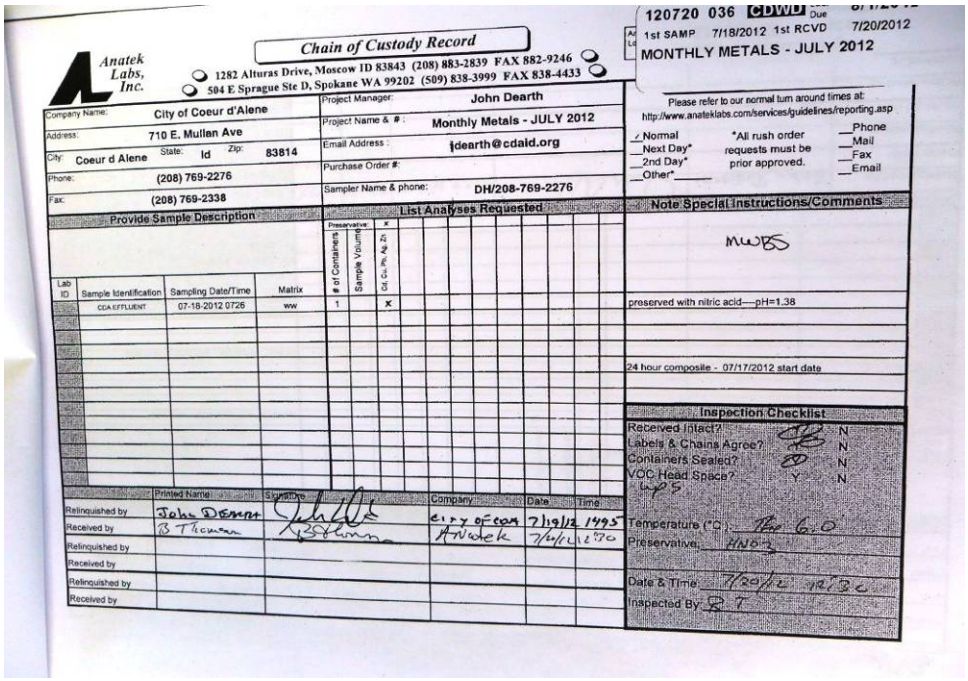
	Printed Name	Signature	Company	Date	Time
Relinquished by	John Dearth		City of Coeur	7/19/12	1495
Received by					
Relinquished by					
Received by					
Relinquished by					
Received by					

Temperature (°C):
Preservative:
Date & Time:
Inspected By:

City of Coeur d' Alene
Date: 07/18/2012
Time: 0726
Sampler: DH
Sample ID: CDA EFFLUENT

EFFLUENT LAB RESULTS

Photograph by David Domingo (EPA) on September 11, 2012 looking at the chain of custody form for effluent sample collected on July 18, 2012. Note the sample preserved with nitric acid to pH of 1.38 standard units (su).



120720 036 CDWD Due
1st SAMP 7/18/2012 1st RCVD 7/20/2012
MONTHLY METALS - JULY 2012

Anatek Labs, Inc.

Chain of Custody Record

1282 Alturas Drive, Moscow ID 83843 (208) 883-2839 FAX 882-9246
504 E Sprague Ste D, Spokane WA 99202 (509) 838-3999 FAX 838-4433

Company Name: City of Coeur d'Alene
Address: 710 E. Mullan Ave
City: Coeur d Alene State: Id Zip: 83814
Phone: (208) 769-2276
Fax: (208) 769-2338

Project Manager: John Dearth
Project Name & #: Monthly Metals - JULY 2012
Email Address: jdearth@cdaid.org
Purchase Order #:
Sampler Name & phone: DH/208-769-2276

Please refer to our normal turn around times at: http://www.anateklabs.com/services/guidelines/reporting.asp
✓ Normal
__Next Day*
__2nd Day*
__Other*____
*All rush order requests must be prior approved.
__Phone
__Mail
__Fax
__Email

Provide Sample Description

List Analyses Requested

Note Special Instructions/Comments
MWBS

Lab ID	Sample Identification	Sampling Date/Time	Matrix	# of Containers	Sample Volume	Pres: Ox, Hc, Ac, Zn
	CDA EFFLUENT	07-18-2012 0726	ww	1		X

preserved with nitric acid—pH=1.38

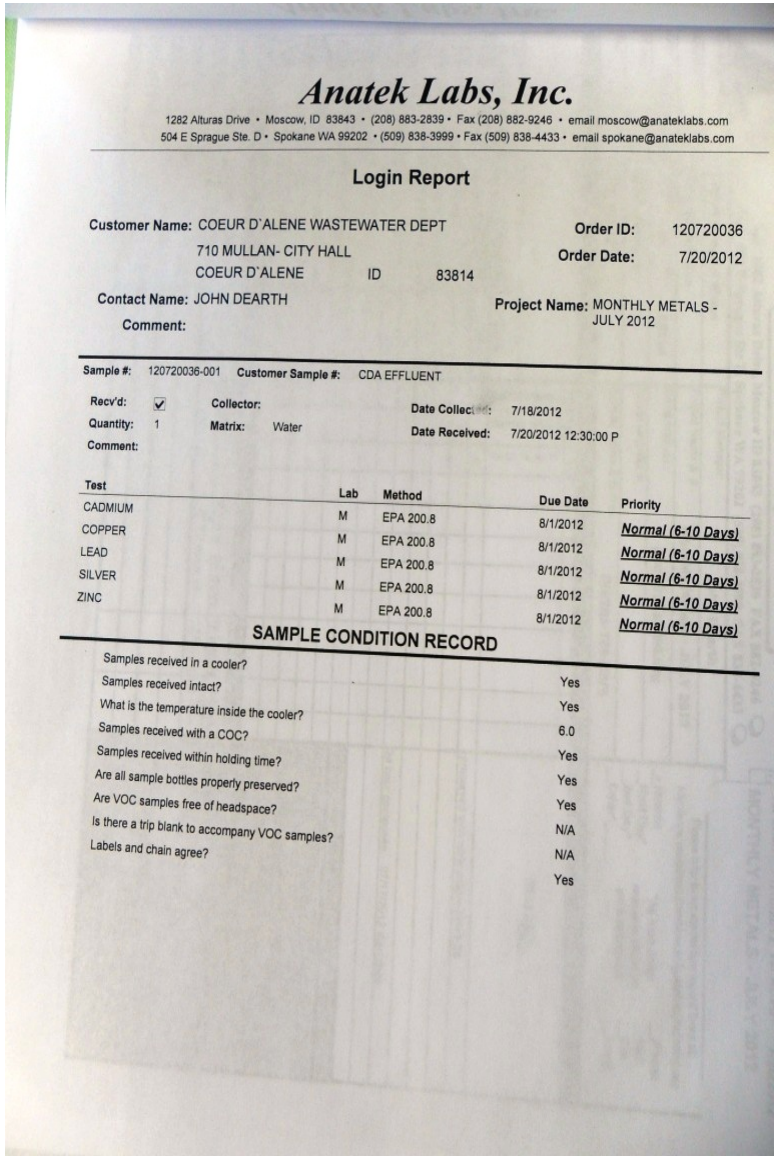
24 hour composite - 07/17/2012 start date

Inspection Checklist
Received Intact? Y N
Labels & Chains Agree? Y N
Containers Sealed? Y N
VOC Head Space? Y N
Lab 25

	Printed Name	Signature	Company	Date	Time
Relinquished by	John Dearth		City of Coeur	7/19/12	1495
Received by	B Thomas		Anatek	7/20/12	0820
Relinquished by					
Received by					
Relinquished by					
Received by					

Temperature (°C): Thm 6.0
Preservative: HNO3
Date & Time: 7/20/12 0826
Inspected By: BT

Photograph by David Domingo (EPA) on September 11, 2012 looking at the chain of custody form for effluent sample collected on July 18, 2012. Note the sample preserved with nitric acid to pH of 1.38 su and sample preservation temperature was 6.0°C.



Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Login Report

Customer Name: COEUR D`ALENE WASTEWATER DEPT
710 MULLAN- CITY HALL
COEUR D`ALENE ID 83814
Contact Name: JOHN DEARTH
Comment:

Order ID: 120720036
Order Date: 7/20/2012
Project Name: MONTHLY METALS - JULY 2012

Sample #: 120720036-001 **Customer Sample #:** CDA EFFLUENT

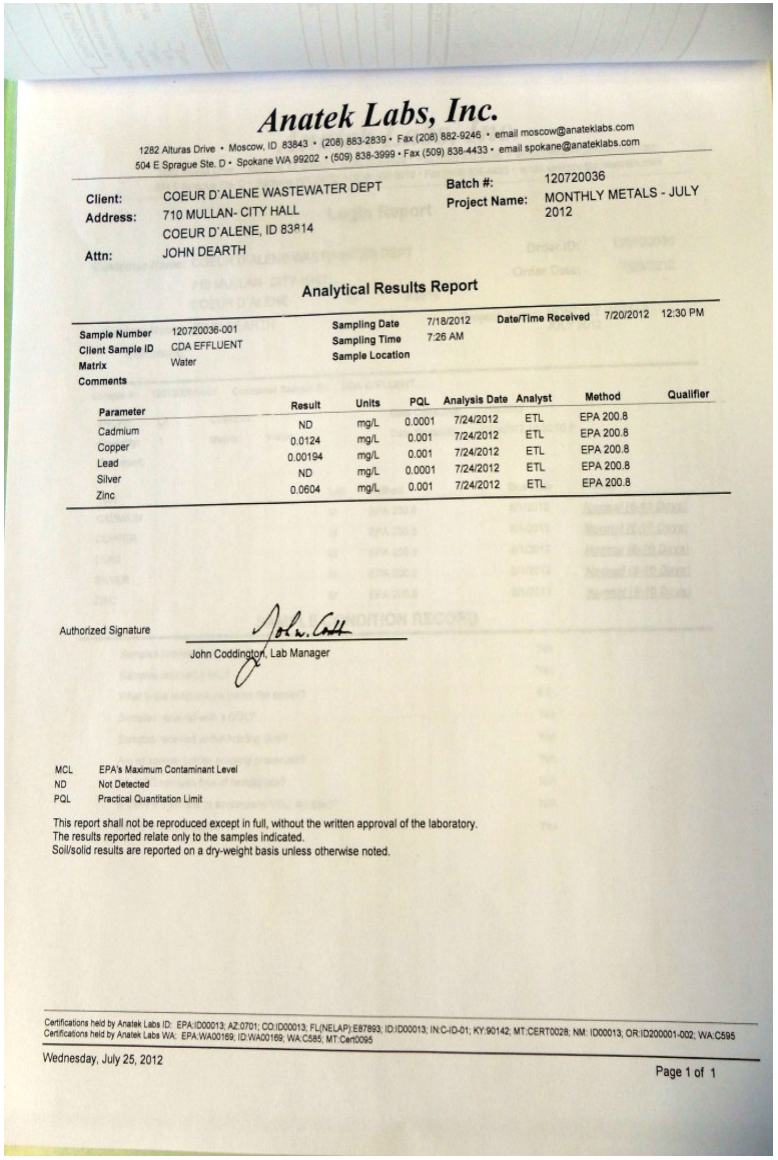
Recv'd: ☑ **Collector:** **Date Collected:** 7/18/2012
Quantity: 1 **Matrix:** Water **Date Received:** 7/20/2012 12:30:00 P
Comment:

Test	Lab	Method	Due Date	Priority
CADMIUM	M	EPA 200.8	8/1/2012	Normal (6-10 Days)
COPPER	M	EPA 200.8	8/1/2012	Normal (6-10 Days)
LEAD	M	EPA 200.8	8/1/2012	Normal (6-10 Days)
SILVER	M	EPA 200.8	8/1/2012	Normal (6-10 Days)
ZINC	M	EPA 200.8	8/1/2012	Normal (6-10 Days)

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature inside the cooler?	6.0
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	N/A
Is there a trip blank to accompany VOC samples?	N/A
Labels and chain agree?	Yes

Photograph by David Domingo (EPA) on September 11, 2012 looking at the login report for effluent sample collected on July 18, 2012.



Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: COEUR D`ALENE WASTEWATER DEPT
Address: 710 MULLAN- CITY HALL
COEUR D`ALENE, ID 83814
Attn: JOHN DEARTH

Batch #: 120720036
Project Name: MONTHLY METALS - JULY 2012

Analytical Results Report

Sample Number 120720036-001 **Sampling Date** 7/18/2012 **Date/Time Received** 7/20/2012 12:30 PM
Client Sample ID CDA EFFLUENT **Sampling Time** 7:26 AM
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cadmium	ND	mg/L	0.0001	7/24/2012	ETL	EPA 200.8	
Copper	0.0124	mg/L	0.001	7/24/2012	ETL	EPA 200.8	
Lead	0.00194	mg/L	0.001	7/24/2012	ETL	EPA 200.8	
Silver	ND	mg/L	0.0001	7/24/2012	ETL	EPA 200.8	
Zinc	0.0604	mg/L	0.001	7/24/2012	ETL	EPA 200.8	

Authorized Signature
John Coddington, Lab Manager

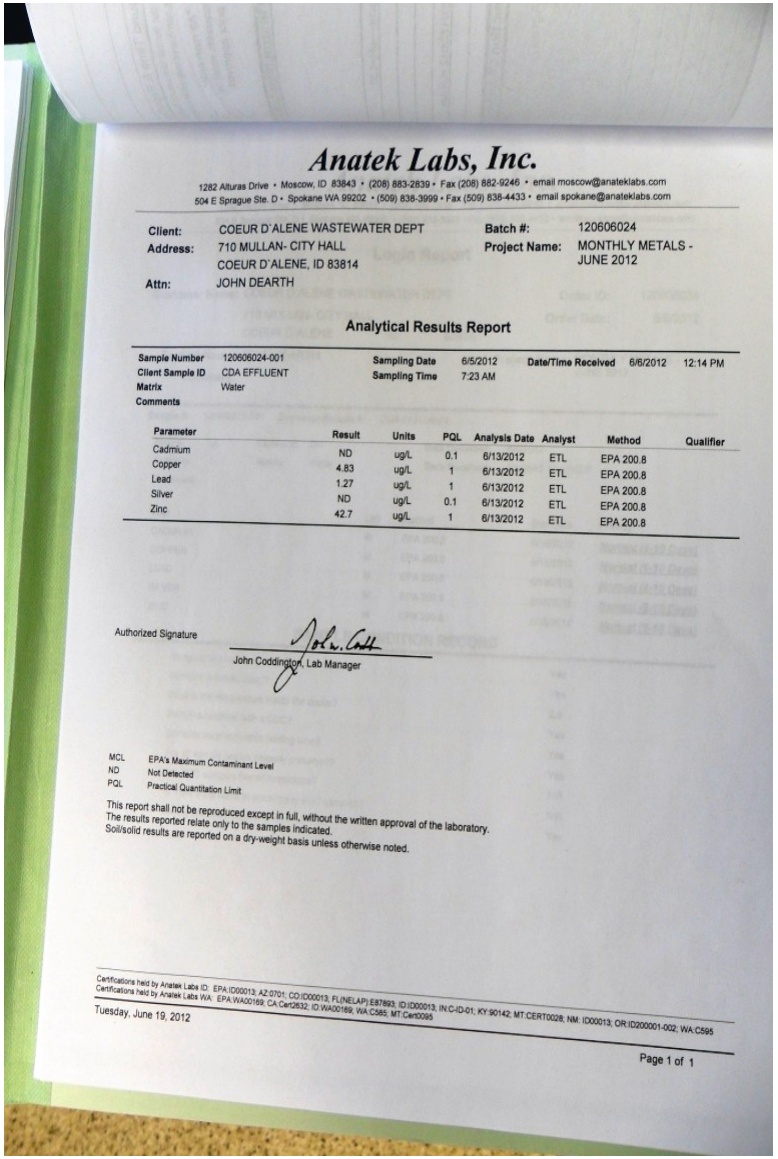
MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Wednesday, July 25, 2012 Page 1 of 1

Photograph by David Domingo (EPA) on September 11, 2012 looking at the certificate of analysis for effluent sample collected on July 18, 2012.



Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: COEUR D'ALENE WASTEWATER DEPT
Address: 710 MULLAN- CITY HALL
COEUR D'ALENE, ID 83814
Attn: JOHN DEARTH

Batch #: 120606024
Project Name: MONTHLY METALS - JUNE 2012

Analytical Results Report

Sample Number 120606024-001
Client Sample ID CDA EFFLUENT
Matrix Water
Comments

Sampling Date 6/5/2012
Sampling Time 7:23 AM
Date/Time Received 6/6/2012 12:14 PM

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cadmium	ND	ug/L	0.1	6/13/2012	ETL	EPA 200.8	
Copper	4.83	ug/L	1	6/13/2012	ETL	EPA 200.8	
Lead	1.27	ug/L	1	6/13/2012	ETL	EPA 200.8	
Silver	ND	ug/L	0.1	6/13/2012	ETL	EPA 200.8	
Zinc	42.7	ug/L	1	6/13/2012	ETL	EPA 200.8	

Authorized Signature
John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

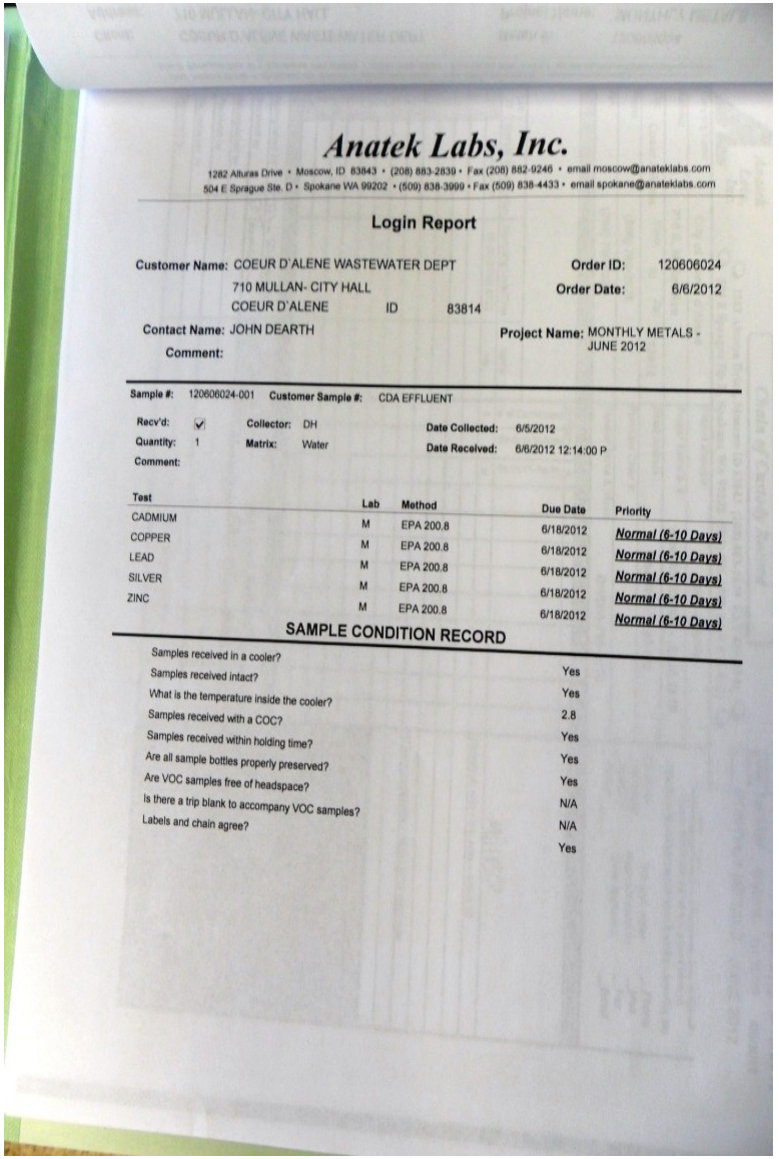
This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Tuesday, June 19, 2012

Page 1 of 1

Photograph by David Domingo (EPA) on September 11, 2012 looking at the certificate of analysis for effluent sample collected on June 5, 2012.



Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Login Report

Customer Name: COEUR D'ALENE WASTEWATER DEPT
710 MULLAN- CITY HALL
COEUR D'ALENE ID 83814
Contact Name: JOHN DEARTH
Comment:

Order ID: 120606024
Order Date: 6/6/2012
Project Name: MONTHLY METALS - JUNE 2012

Sample #: 120606024-001 Customer Sample #: CDA EFFLUENT

Recv'd: ☑ Collector: DH
Quantity: 1 Matrix: Water
Comment:

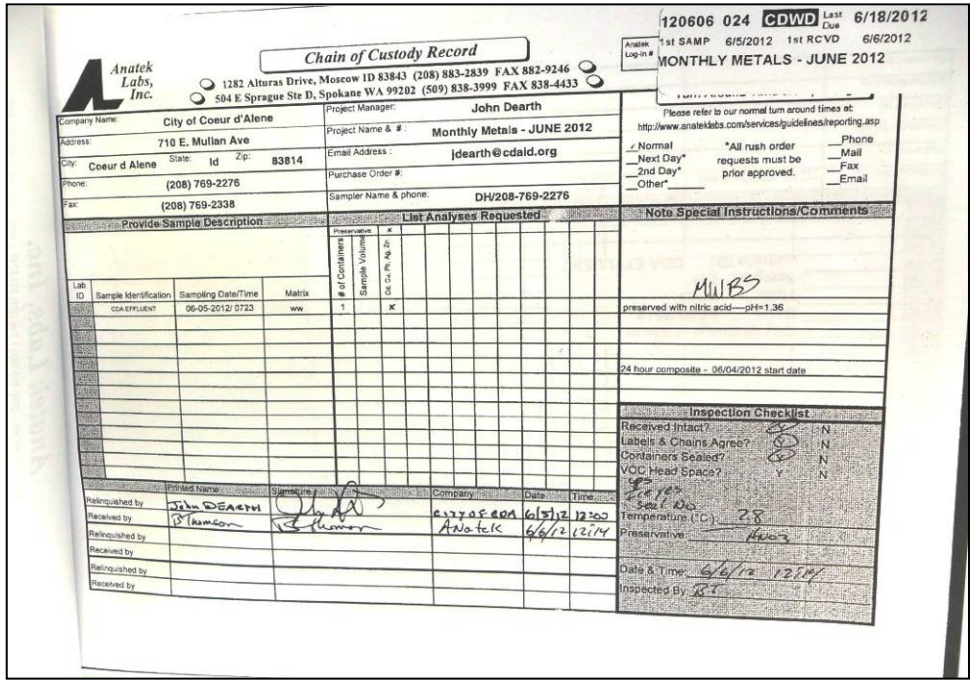
Date Collected: 6/5/2012
Date Received: 6/6/2012 12:14:00 P

Test	Lab	Method	Due Date	Priority
CADMIUM	M	EPA 200.8	6/18/2012	Normal (6-10 Days)
COPPER	M	EPA 200.8	6/18/2012	Normal (6-10 Days)
LEAD	M	EPA 200.8	6/18/2012	Normal (6-10 Days)
SILVER	M	EPA 200.8	6/18/2012	Normal (6-10 Days)
ZINC	M	EPA 200.8	6/18/2012	Normal (6-10 Days)

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature inside the cooler?	2.8
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	N/A
Is there a trip blank to accompany VOC samples?	N/A
Labels and chain agree?	Yes

Photograph by David Domingo (EPA) on September 11, 2012 looking at the login report for effluent sample collected on June 5, 2012



Anatek Labs, Inc.
1282 Alturas Drive, Moscow ID 83843 (208) 883-2839 FAX 882-9246
504 E Sprague Ste D, Spokane WA 99202 (509) 838-3999 FAX 838-4433

Chain of Custody Record

120606 024 CDWD Last Due 6/18/2012
1st SAMP 6/5/2012 1st RCVD 6/6/2012
MONTHLY METALS - JUNE 2012

Company Name: City of Coeur d'Alene
Address: 710 E. Mullan Ave
City: Coeur d Alene State: Id Zip: 83814
Phone: (208) 769-2276
Fax: (208) 769-2338

Project Manager: John Dearth
Project Name & #: Monthly Metals - JUNE 2012
Email Address: jdearth@cdaid.org
Purchase Order #:
Sampler Name & phone: DH/208-769-2276

Please refer to our normal turn around times at: http://www.anateklabs.com/services/guidelines/reporting.asp
✓ Normal __Next Day* __2nd Day* __Other*
*All rush order requests must be prior approved.
__Phone __Mail __Fax __Email

Provide Sample Description | List Analyses Requested | Note Special Instructions/Comments

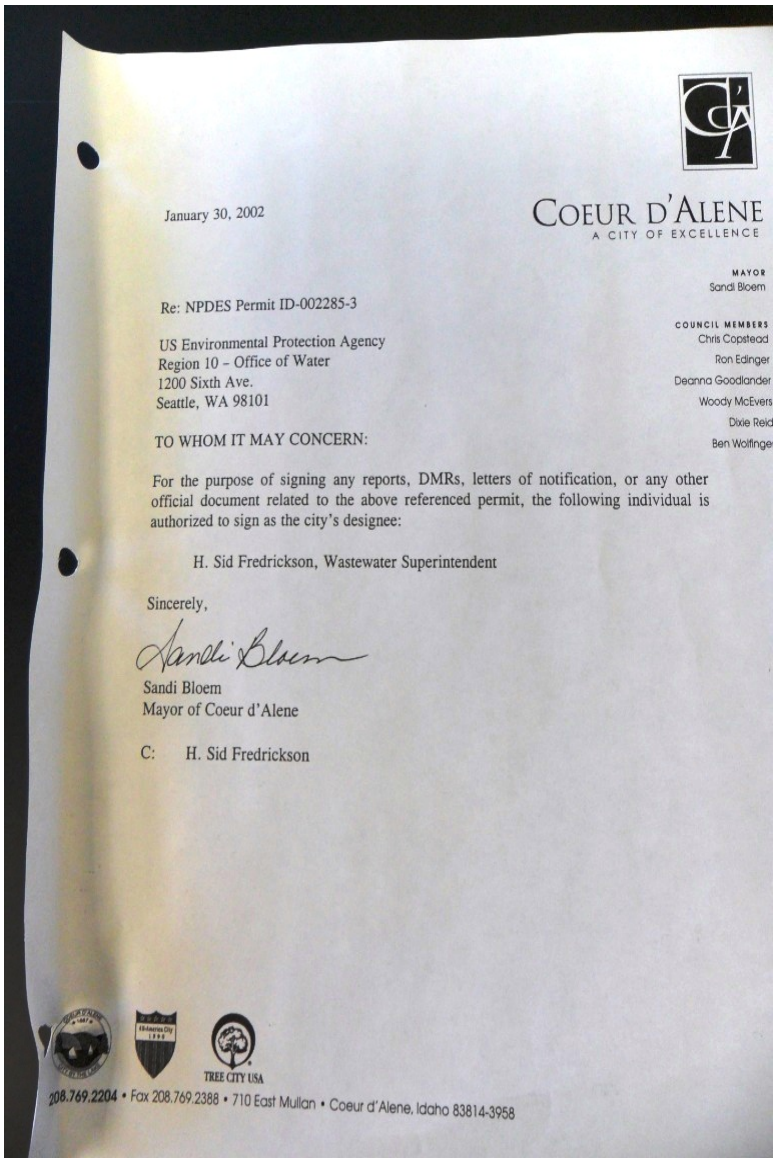
Lab ID	Sample Identification	Sampling Date/Time	Matrix	# of Containers	Sample Volume	Preservative	Metals
	CDA EFFLUENT	06-05-2012/ 0723	ww	1		HNO3	X

MMBS
preserved with nitric acid—pH=1.36
24 hour composite - 06/04/2012 start date

Inspection Checklist
Received Intact? Y N
Labels & Chains Agree? Y N
Containers Sealed? Y N
VOC Head Space? Y N
Seal Dc
Temperature (°C): 2.8
Preservative: HNO3
Date & Time: 6/6/12 1214
Inspected By:

	Printed Name	Signature	Company	Date	Time
Relinquished by	John DEARTH		CDA EFFLUENT	6/5/12	1200
Received by	B Thomson		Anatek	6/6/12	1214
Relinquished by					
Received by					
Relinquished by					
Received by					

Photograph by David Domingo (EPA) on September 11, 2012 looking at the chain of custody form for effluent sample collected on June 5, 2012. Note the sample preserved with nitric acid to pH of 1.36 su and sample preservation temperature was 2.8°C.



COEUR D'ALENE
A CITY OF EXCELLENCE

January 30, 2002

MAYOR
Sandi Bloem

COUNCIL MEMBERS
Chris Copstead
Ron Edinger
Deanna Goodlander
Woody McEvers
Dixie Reid
Ben Wolfinger

Re: NPDES Permit ID-002285-3

US Environmental Protection Agency
Region 10 – Office of Water
1200 Sixth Ave.
Seattle, WA 98101

TO WHOM IT MAY CONCERN:

For the purpose of signing any reports, DMRs, letters of notification, or any other official document related to the above referenced permit, the following individual is authorized to sign as the city's designee:

H. Sid Fredrickson, Wastewater Superintendent

Sincerely,

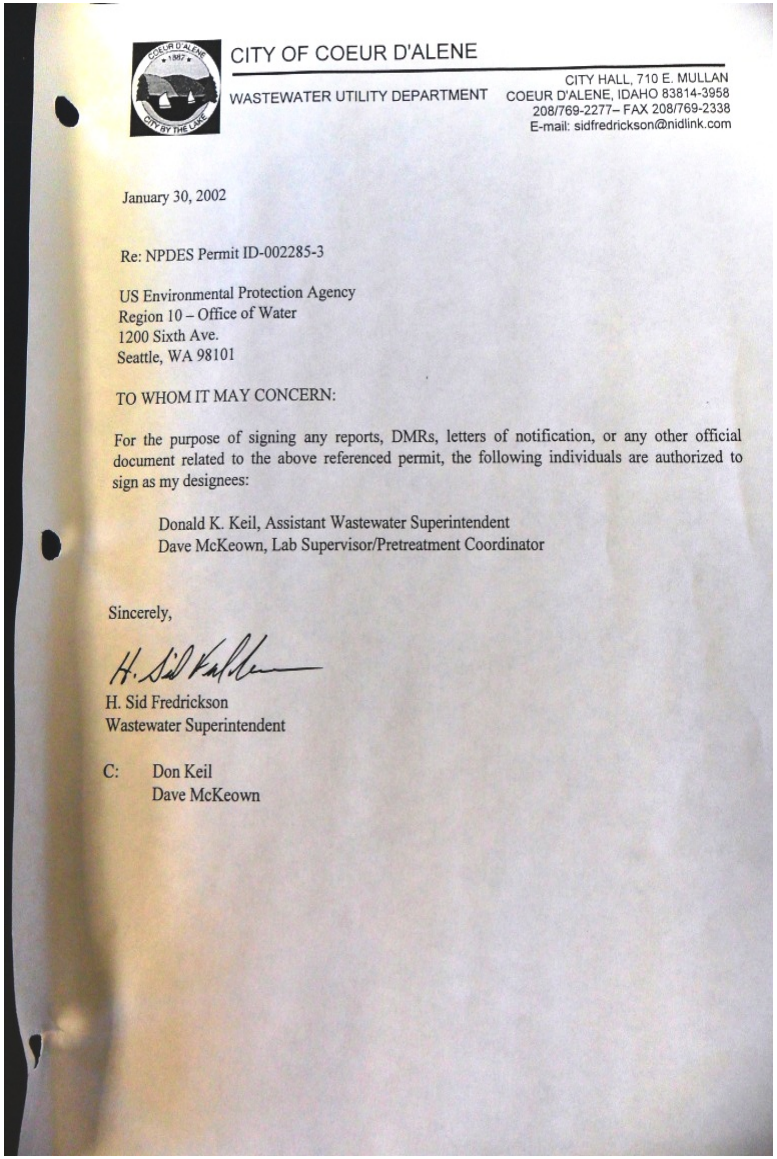
Sandi Bloem
Mayor of Coeur d'Alene

C: H. Sid Fredrickson

TREE CITY USA

208.769.2204 • Fax 208.769.2388 • 710 East Mullan • Coeur d'Alene, Idaho 83814-3958

Photograph by David Domingo (EPA) on September 11, 2012 looking at the January 30, 2002 written authorization from the mayor identifying Mr. H. Sid Fredrickson as the duly authorized representative in accordance with Part VI.E.2 of the Permit.



CITY OF COEUR D'ALENE

WASTEWATER UTILITY DEPARTMENT

CITY HALL, 710 E. MULLAN
COEUR D'ALENE, IDAHO 83814-3958
208/769-2277– FAX 208/769-2338
E-mail: sidfredrickson@nidlink.com

January 30, 2002

Re: NPDES Permit ID-002285-3

US Environmental Protection Agency
Region 10 – Office of Water
1200 Sixth Ave.
Seattle, WA 98101

TO WHOM IT MAY CONCERN:

For the purpose of signing any reports, DMRs, letters of notification, or any other official document related to the above referenced permit, the following individuals are authorized to sign as my designees:

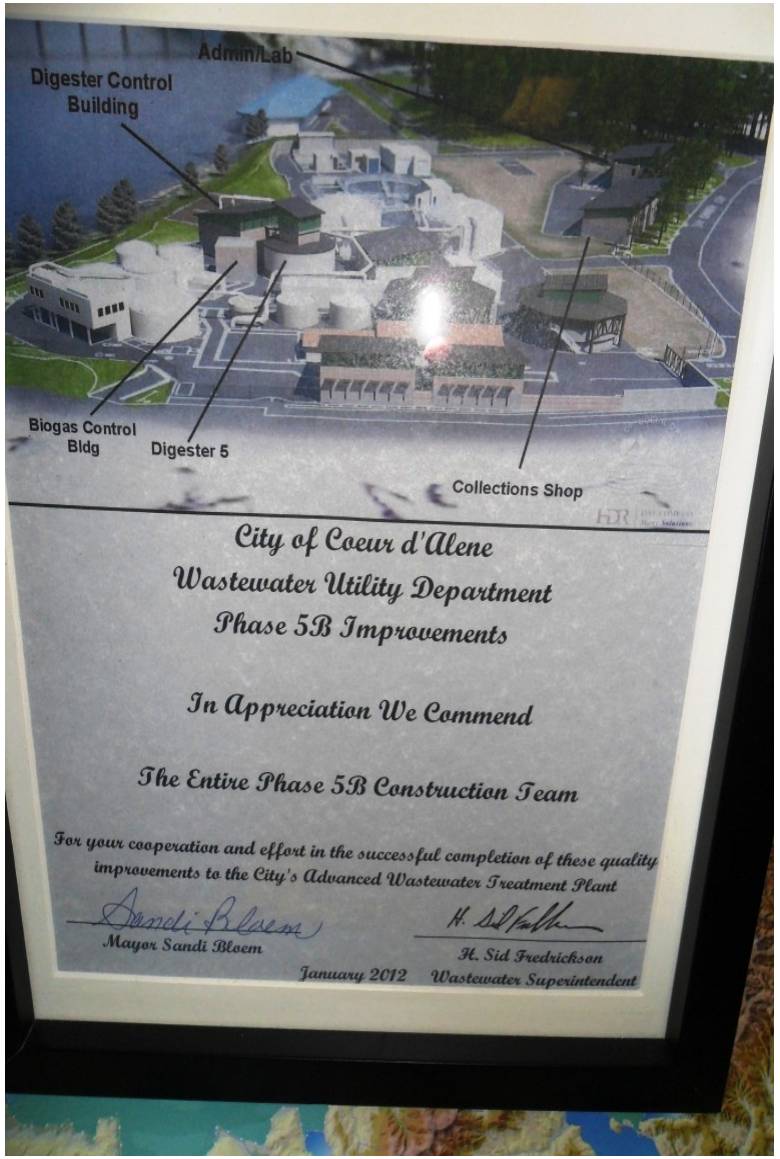
Donald K. Keil, Assistant Wastewater Superintendent
Dave McKeown, Lab Supervisor/Pretreatment Coordinator

Sincerely,

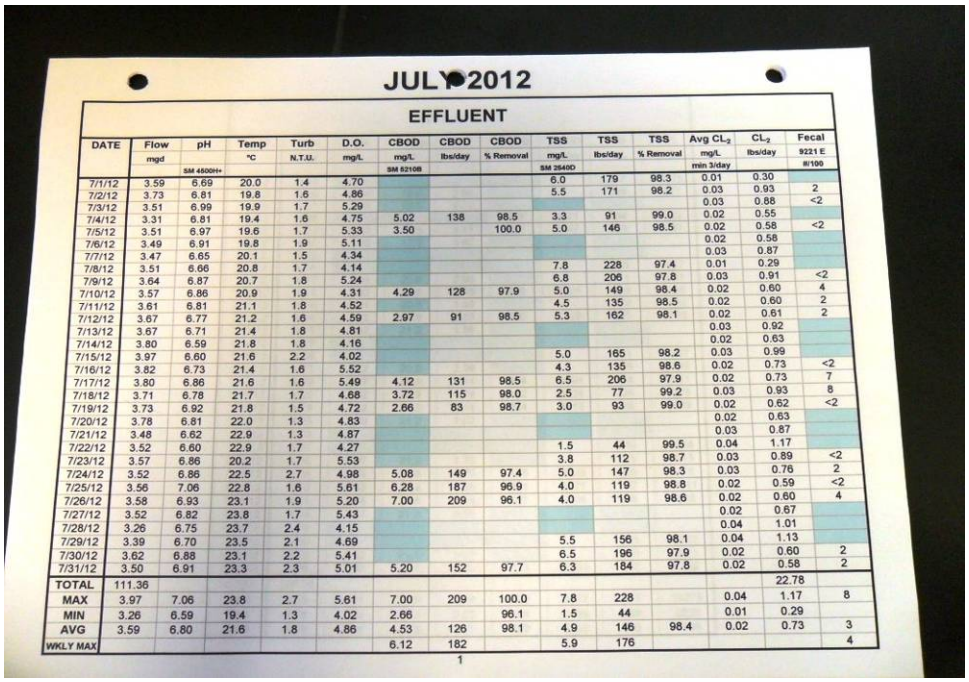
H. Sid Fredrickson
Wastewater Superintendent

C: Don Keil
Dave McKeown

Photograph by David Domingo (EPA) on September 11, 2012 looking at the January 30, 2002 written authorization from the wastewater superintendent identifying Mr. Don Keil and Mr. Dave McKeown as duly authorized representatives.



Photograph by David Domingo (EPA) on September 11, 2012 looking at the plaque of appreciation in the lobby of the Facility. Note the Facility upgrades identified as Phase 5B improvements.



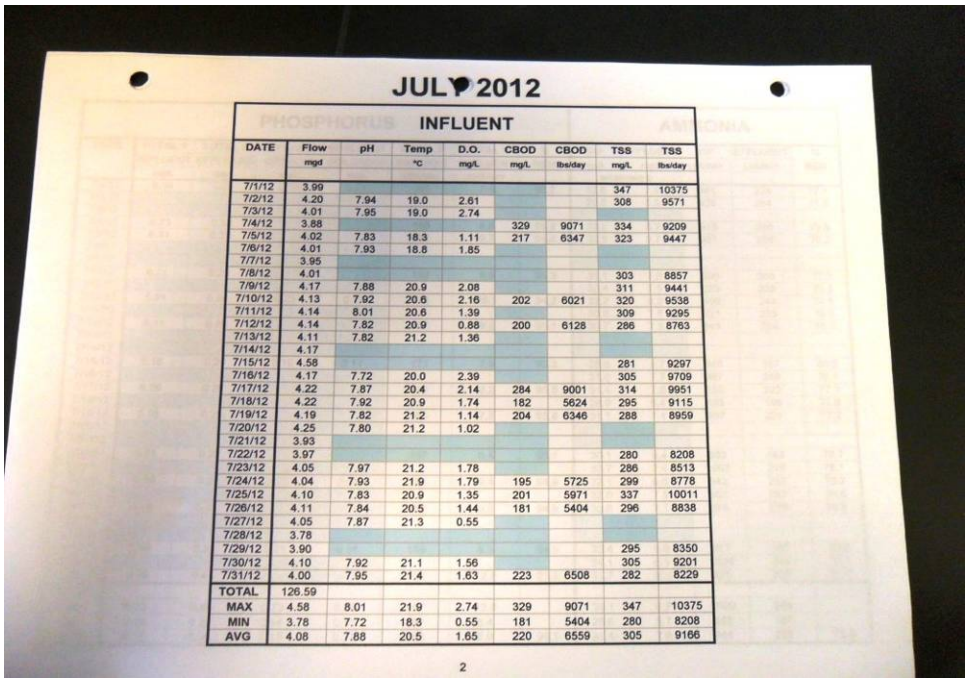
JULY 2012

EFFLUENT

DATE	Flow	pH	Temp	Turb	D.O.	CBOD	CBOD	CBOD	TSS	TSS	TSS	Avg CL_2	CL_2	Fecal
	mgd	SM 4500H+	°C	N.T.U.	mg/L	mg/L SM 5210B	lbs/day	% Removal	mg/L SM 2540D	lbs/day	% Removal	mg/L min 3/day	lbs/day	9221 E #/100
7/1/12	3.59	6.69	20.0	1.4	4.70				6.0	179	98.3	0.01	0.30	
7/2/12	3.73	6.81	19.8	1.6	4.86				5.5	171	98.2	0.03	0.93	2
7/3/12	3.51	6.99	19.9	1.7	5.29							0.03	0.88	<2
7/4/12	3.31	6.81	19.4	1.6	4.75	5.02	138	98.5	3.3	91	99.0	0.02	0.55	
7/5/12	3.51	6.97	19.6	1.7	5.33	3.50		100.0	5.0	146	98.5	0.02	0.58	<2
7/6/12	3.49	6.91	19.8	1.9	5.11							0.02	0.58	
7/7/12	3.47	6.65	20.1	1.5	4.34							0.03	0.87	
7/8/12	3.51	6.66	20.8	1.7	4.14				7.8	228	97.4	0.01	0.29	
7/9/12	3.64	6.87	20.7	1.8	5.24				6.8	206	97.8	0.03	0.91	<2
7/10/12	3.57	6.86	20.9	1.9	4.31	4.29	128	97.9	5.0	149	98.4	0.02	0.60	4
7/11/12	3.61	6.81	21.1	1.8	4.52				4.5	135	98.5	0.02	0.60	2
7/12/12	3.67	6.77	21.2	1.6	4.59	2.97	91	98.5	5.3	162	98.1	0.02	0.61	2
7/13/12	3.67	6.71	21.4	1.8	4.81							0.03	0.92	
7/14/12	3.80	6.59	21.8	1.8	4.16							0.02	0.63	
7/15/12	3.97	6.60	21.6	2.2	4.02				5.0	165	98.2	0.03	0.99	
7/16/12	3.82	6.73	21.4	1.6	5.52				4.3	135	98.6	0.02	0.73	<2
7/17/12	3.80	6.86	21.6	1.6	5.49	4.12	131	98.5	6.5	206	97.9	0.02	0.73	7
7/18/12	3.71	6.78	21.7	1.7	4.68	3.72	115	98.0	2.5	77	99.2	0.03	0.93	8
7/19/12	3.73	6.92	21.8	1.5	4.72	2.66	83	98.7	3.0	93	99.0	0.02	0.62	<2
7/20/12	3.78	6.81	22.0	1.3	4.83							0.02	0.63	
7/21/12	3.48	6.62	22.9	1.3	4.87							0.03	0.87	
7/22/12	3.52	6.60	22.9	1.7	4.27				1.5	44	99.5	0.04	1.17	
7/23/12	3.57	6.86	20.2	1.7	5.53				3.8	112	98.7	0.03	0.89	<2
7/24/12	3.52	6.86	22.5	2.7	4.98	5.08	149	97.4	5.0	147	98.3	0.03	0.76	2
7/25/12	3.56	7.06	22.8	1.6	5.61	6.28	187	96.9	4.0	119	98.8	0.02	0.59	<2
7/26/12	3.58	6.93	23.1	1.9	5.20	7.00	209	96.1	4.0	119	98.6	0.02	0.60	4
7/27/12	3.52	6.82	23.8	1.7	5.43							0.02	0.67	
7/28/12	3.26	6.75	23.7	2.4	4.15							0.04	1.01	
7/29/12	3.39	6.70	23.5	2.1	4.69				5.5	156	98.1	0.04	1.13	
7/30/12	3.62	6.88	23.1	2.2	5.41				6.5	196	97.9	0.02	0.60	2
7/31/12	3.50	6.91	23.3	2.3	5.01	5.20	152	97.7	6.3	184	97.8	0.02	0.58	2
TOTAL	111.36												22.78	
MAX	3.97	7.06	23.8	2.7	5.61	7.00	209	100.0	7.8	228		0.04	1.17	8
MIN	3.26	6.59	19.4	1.3	4.02	2.66		96.1	1.5	44		0.01	0.29	
AVG	3.59	6.80	21.6	1.8	4.86	4.53	126	98.1	4.9	146	98.4	0.02	0.73	3
WKLY MAX						6.12	182		5.9	176				4

1

Photograph by David Domingo (EPA) on September 11, 2012 looking at the effluent worksheet for the month of July 2012.



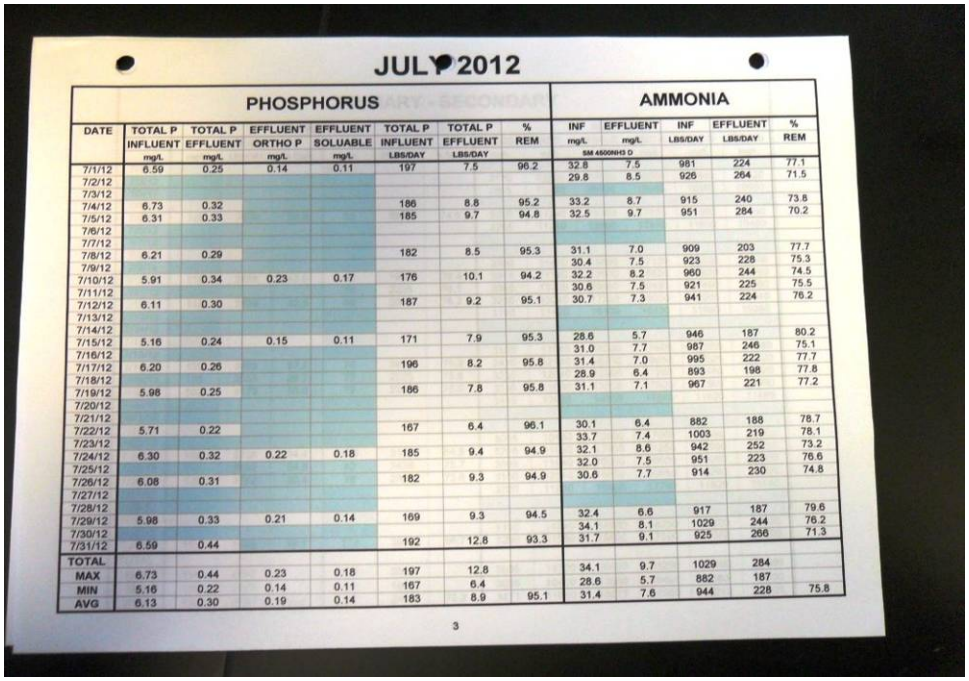
JULY 2012

INFLUENT

DATE	Flow	pH	Temp	D.O.	CBOD	CBOD	TSS	TSS
	mgd		°C	mg/L	mg/L	lbs/day	mg/L	lbs/day
7/1/12	3.99						347	10375
7/2/12	4.20	7.94	19.0	2.61			308	9571
7/3/12	4.01	7.95	19.0	2.74				
7/4/12	3.88				329	9071	334	9209
7/5/12	4.02	7.83	18.3	1.11	217	6347	323	9447
7/6/12	4.01	7.93	18.8	1.85				
7/7/12	3.95							
7/8/12	4.01						303	8857
7/9/12	4.17	7.88	20.9	2.08			311	9441
7/10/12	4.13	7.92	20.6	2.16	202	6021	320	9538
7/11/12	4.14	8.01	20.6	1.39			309	9295
7/12/12	4.14	7.82	20.9	0.88	200	6128	286	8763
7/13/12	4.11	7.82	21.2	1.36				
7/14/12	4.17							
7/15/12	4.58						281	9297
7/16/12	4.17	7.72	20.0	2.39			305	9709
7/17/12	4.22	7.87	20.4	2.14	284	9001	314	9951
7/18/12	4.22	7.92	20.9	1.74	182	5624	295	9115
7/19/12	4.19	7.82	21.2	1.14	204	6346	288	8959
7/20/12	4.25	7.80	21.2	1.02				
7/21/12	3.93							
7/22/12	3.97						280	8208
7/23/12	4.05	7.97	21.2	1.78			286	8513
7/24/12	4.04	7.93	21.9	1.79	195	5725	299	8778
7/25/12	4.10	7.83	20.9	1.35	201	5971	337	10011
7/26/12	4.11	7.84	20.5	1.44	181	5404	296	8838
7/27/12	4.05	7.87	21.3	0.55				
7/28/12	3.78							
7/29/12	3.90						295	8350
7/30/12	4.10	7.92	21.1	1.56			305	9201
7/31/12	4.00	7.95	21.4	1.63	223	6508	282	8229
TOTAL	126.59							
MAX	4.58	8.01	21.9	2.74	329	9071	347	10375
MIN	3.78	7.72	18.3	0.55	181	5404	280	8208
AVG	4.08	7.88	20.5	1.65	220	6559	305	9166

2

Photograph by David Domingo (EPA) on September 11, 2012 looking at the influent worksheet for the month of July 2012.

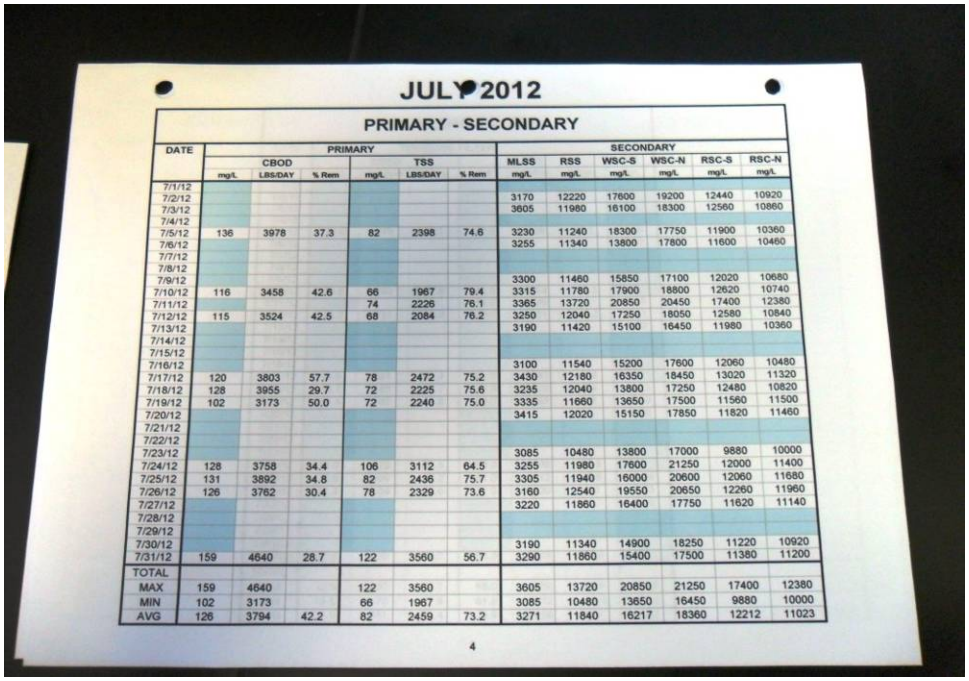


JULY 2012

DATE	PHOSPHORUS TOTAL P INFLUENT mg/L	TOTAL P EFFLUENT mg/L	EFFLUENT ORTHO P mg/L	EFFLUENT SOLUABLE mg/L	TOTAL P INFLUENT LBS/DAY	TOTAL P EFFLUENT LBS/DAY	% REM	AMMONIA INF mg/L SM 4500NH3 D	EFFLUENT mg/L	INF LBS/DAY	EFFLUENT LBS/DAY	% REM
7/1/12	6.59	0.25	0.14	0.11	197	7.5	96.2	32.8	7.5	981	224	77.1
7/2/12								29.8	8.5	926	264	71.5
7/3/12												
7/4/12	6.73	0.32			186	8.8	95.2	33.2	8.7	915	240	73.8
7/5/12	6.31	0.33			185	9.7	94.8	32.5	9.7	951	284	70.2
7/6/12												
7/7/12												
7/8/12	6.21	0.29			182	8.5	95.3	31.1	7.0	909	203	77.7
7/9/12								30.4	7.5	923	228	75.3
7/10/12	5.91	0.34	0.23	0.17	176	10.1	94.2	32.2	8.2	960	244	74.5
7/11/12								30.6	7.5	921	225	75.5
7/12/12	6.11	0.30			187	9.2	95.1	30.7	7.3	941	224	76.2
7/13/12												
7/14/12												
7/15/12	5.16	0.24	0.15	0.11	171	7.9	95.3	28.6	5.7	946	187	80.2
7/16/12								31.0	7.7	987	246	75.1
7/17/12	6.20	0.26			196	8.2	95.8	31.4	7.0	995	222	77.7
7/18/12								28.9	6.4	893	198	77.8
7/19/12	5.98	0.25			186	7.8	95.8	31.1	7.1	967	221	77.2
7/20/12												
7/21/12												
7/22/12	5.71	0.22			167	6.4	96.1	30.1	6.4	882	188	78.7
7/23/12								33.7	7.4	1003	219	78.1
7/24/12	6.30	0.32	0.22	0.18	185	9.4	94.9	32.1	8.6	942	252	73.2
7/25/12								32.0	7.5	951	223	76.6
7/26/12	6.08	0.31			182	9.3	94.9	30.6	7.7	914	230	74.8
7/27/12												
7/28/12												
7/29/12	5.98	0.33	0.21	0.14	169	9.3	94.5	32.4	6.6	917	187	79.6
7/30/12								34.1	8.1	1029	244	76.2
7/31/12	6.59	0.44			192	12.8	93.3	31.7	9.1	925	266	71.3
TOTAL												
MAX	6.73	0.44	0.23	0.18	197	12.8		34.1	9.7	1029	284	
MIN	5.16	0.22	0.14	0.11	167	6.4		28.6	5.7	882	187	
AVG	6.13	0.30	0.19	0.14	183	8.9	95.1	31.4	7.6	944	228	75.8

3

Photograph by David Domingo (EPA) on September 11, 2012 looking at the total phosphorus and total ammonia worksheet for the month of July 2012.



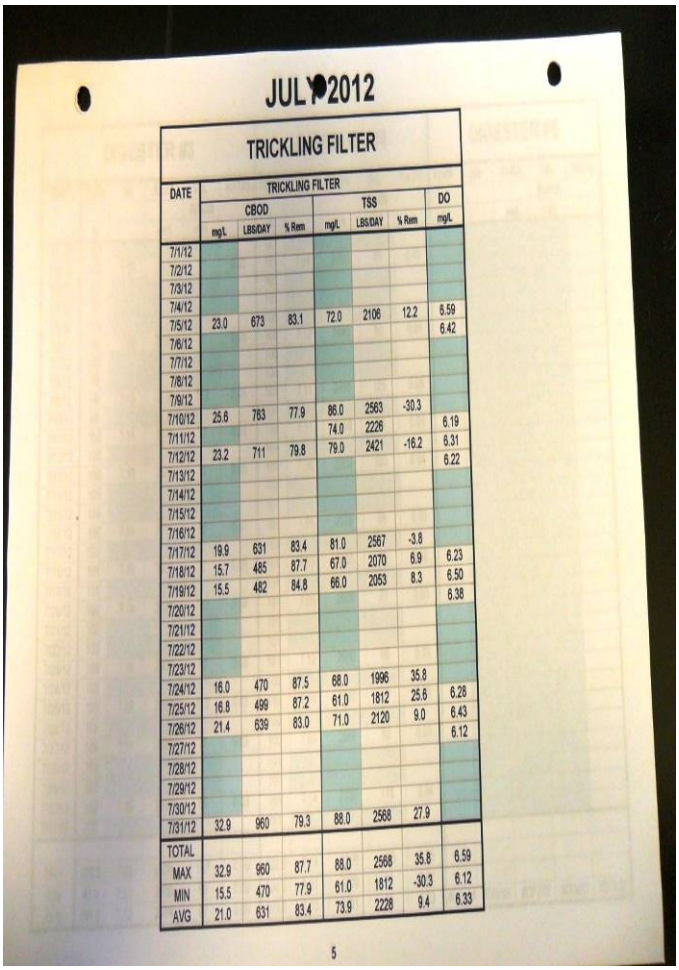
JULY 2012

PRIMARY - SECONDARY

DATE	PRIMARY CBOD mg/L	CBOD LBS/DAY	CBOD % Rem	TSS mg/L	TSS LBS/DAY	TSS % Rem	SECONDARY MLSS mg/L	RSS mg/L	WSC-S mg/L	WSC-N mg/L	RSC-S mg/L	RSC-N mg/L
7/1/12												
7/2/12							3170	12220	17600	19200	12440	10920
7/3/12							3605	11980	16100	18300	12560	10860
7/4/12												
7/5/12	136	3978	37.3	82	2398	74.6	3230	11240	18300	17750	11900	10360
7/6/12							3255	11340	13800	17800	11600	10460
7/7/12												
7/8/12												
7/9/12							3300	11460	15850	17100	12020	10680
7/10/12	116	3458	42.6	66	1967	79.4	3315	11780	17900	18800	12620	10740
7/11/12				74	2226	76.1	3365	13720	20850	20450	17400	12380
7/12/12	115	3524	42.5	68	2084	76.2	3250	12040	17250	18050	12580	10840
7/13/12							3190	11420	15100	16450	11980	10360
7/14/12												
7/15/12												
7/16/12							3100	11540	15200	17600	12060	10480
7/17/12	120	3803	57.7	78	2472	75.2	3430	12180	16350	18450	13020	11320
7/18/12	128	3955	29.7	72	2225	75.6	3235	12040	13800	17250	12480	10820
7/19/12	102	3173	50.0	72	2240	75.0	3335	11660	13650	17500	11560	11500
7/20/12							3415	12020	15150	17850	11820	11460
7/21/12												
7/22/12												
7/23/12							3085	10480	13800	17000	9880	10000
7/24/12	128	3758	34.4	106	3112	64.5	3255	11980	17600	21250	12000	11400
7/25/12	131	3892	34.8	82	2436	75.7	3305	11940	16000	20600	12060	11680
7/26/12	126	3762	30.4	78	2329	73.6	3160	12540	19550	20650	12260	11960
7/27/12							3220	11860	16400	17750	11620	11140
7/28/12												
7/29/12												
7/30/12							3190	11340	14900	18250	11220	10920
7/31/12	159	4640	28.7	122	3560	56.7	3290	11860	15400	17500	11380	11200
TOTAL												
MAX	159	4640		122	3560		3605	13720	20850	21250	17400	12380
MIN	102	3173		66	1967		3085	10480	13650	16450	9880	10000
AVG	126	3794	42.2	82	2459	73.2	3271	11840	16217	18360	12212	11023

4

Photograph by David Domingo (EPA) on September 11, 2012 looking at the primary and secondary worksheet for the month of July 2012.



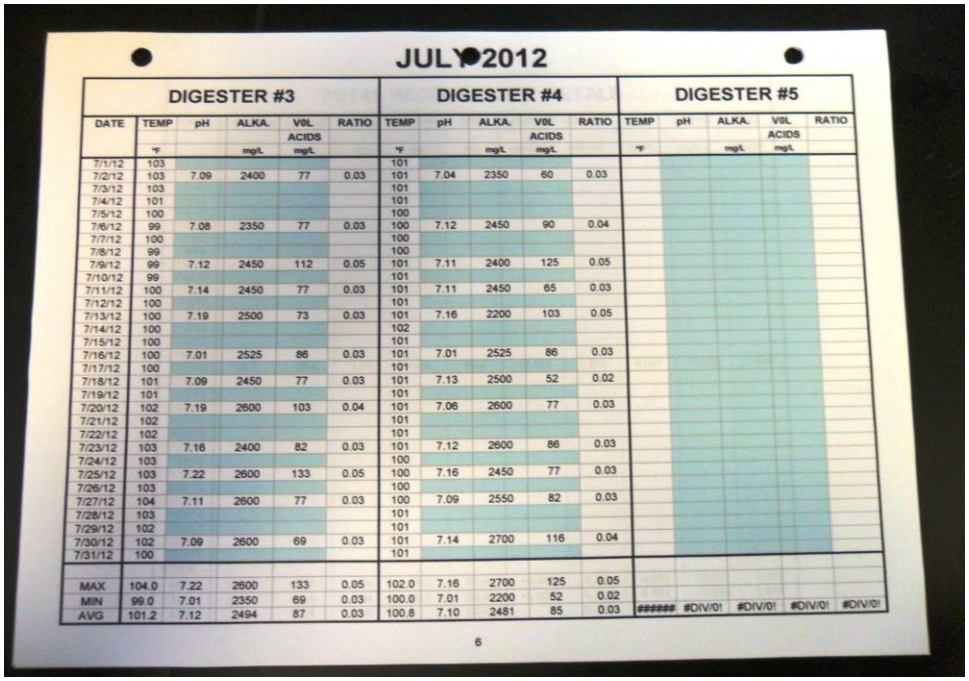
JULY 2012

TRICKLING FILTER

DATE	TRICKLING FILTER						
	CBOD			TSS			DO
	mg/L	LBS/DAY	% Rem	mg/L	LBS/DAY	% Rem	mg/L
7/1/12							
7/2/12							
7/3/12							
7/4/12							8.59
7/5/12	23.0	673	83.1	72.0	2106	12.2	6.42
7/6/12							
7/7/12							
7/8/12							
7/9/12							
7/10/12	25.6	763	77.9	86.0	2563	-30.3	
7/11/12				74.0	2226		6.19
7/12/12	23.2	711	79.8	79.0	2421	-16.2	6.31
7/13/12							6.22
7/14/12							
7/15/12							
7/16/12							
7/17/12	19.9	631	83.4	81.0	2567	-3.8	
7/18/12	15.7	485	87.7	67.0	2070	6.9	6.23
7/19/12	15.5	482	84.8	66.0	2053	8.3	6.50
7/20/12							6.38
7/21/12							
7/22/12							
7/23/12							
7/24/12	16.0	470	87.5	68.0	1996	35.8	
7/25/12	16.8	499	87.2	61.0	1812	25.6	6.28
7/26/12	21.4	639	83.0	71.0	2120	9.0	6.43
7/27/12							6.12
7/28/12							
7/29/12							
7/30/12							
7/31/12	32.9	960	79.3	88.0	2568	27.9	
TOTAL							
MAX	32.9	960	87.7	88.0	2568	35.8	6.59
MIN	15.5	470	77.9	61.0	1812	-30.3	6.12
AVG	21.0	631	83.4	73.9	2228	9.4	6.33

5

Photograph by David Domingo (EPA) on September 11, 2012 looking at the trickling filter worksheet for the month of July 2012.

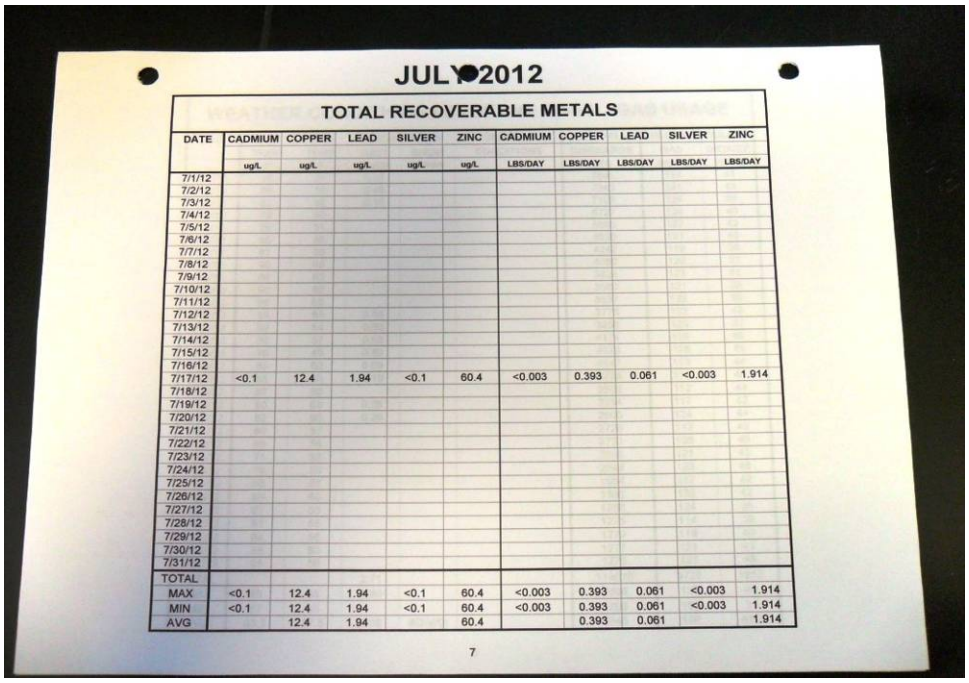


JULY 2012

DATE	DIGESTER #3					DIGESTER #4					DIGESTER #5				
	TEMP	pH	ALKA.	VOL ACIDS	RATIO	TEMP	pH	ALKA.	VOL ACIDS	RATIO	TEMP	pH	ALKA.	VOL ACIDS	RATIO
	°F		mg/L	mg/L		°F		mg/L	mg/L		°F		mg/L	mg/L	
7/1/12	103					101									
7/2/12	103	7.09	2400	77	0.03	101	7.04	2350	60	0.03					
7/3/12	103					101									
7/4/12	101					101									
7/5/12	100					100									
7/6/12	99	7.08	2350	77	0.03	100	7.12	2450	90	0.04					
7/7/12	100					100									
7/8/12	99					100									
7/9/12	99	7.12	2450	112	0.05	101	7.11	2400	125	0.05					
7/10/12	99					101									
7/11/12	100	7.14	2450	77	0.03	101	7.11	2450	65	0.03					
7/12/12	100					101									
7/13/12	100	7.19	2500	73	0.03	101	7.16	2200	103	0.05					
7/14/12	100					102									
7/15/12	100					101									
7/16/12	100	7.01	2525	86	0.03	101	7.01	2525	86	0.03					
7/17/12	100					101									
7/18/12	101	7.09	2450	77	0.03	101	7.13	2500	52	0.02					
7/19/12	101					101									
7/20/12	102	7.19	2600	103	0.04	101	7.06	2600	77	0.03					
7/21/12	102					101									
7/22/12	102					101									
7/23/12	103	7.16	2400	82	0.03	101	7.12	2600	86	0.03					
7/24/12	103					100									
7/25/12	103	7.22	2600	133	0.05	100	7.16	2450	77	0.03					
7/26/12	103					100									
7/27/12	104	7.11	2600	77	0.03	100	7.09	2550	82	0.03					
7/28/12	103					101									
7/29/12	102					101									
7/30/12	102	7.09	2600	69	0.03	101	7.14	2700	116	0.04					
7/31/12	100					101									
MAX	104.0	7.22	2600	133	0.05	102.0	7.16	2700	125	0.05					
MIN	99.0	7.01	2350	69	0.03	100.0	7.01	2200	52	0.02					
AVG	101.2	7.12	2494	87	0.03	100.8	7.10	2481	85	0.03	######	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

6

Photograph by David Domingo (EPA) on September 11, 2012 looking at the digesters #3, #4 and #5 worksheet for the month of July 2012.



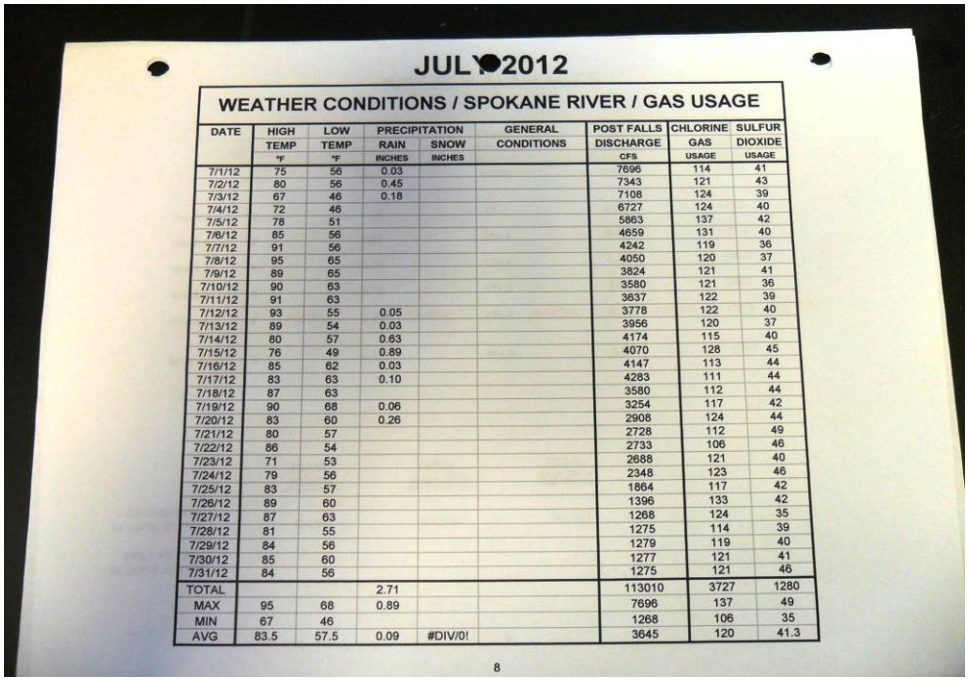
JULY 2012

TOTAL RECOVERABLE METALS

DATE	CADMIUM ug/L	COPPER ug/L	LEAD ug/L	SILVER ug/L	ZINC ug/L	CADMIUM LBS/DAY	COPPER LBS/DAY	LEAD LBS/DAY	SILVER LBS/DAY	ZINC LBS/DAY
7/1/12										
7/2/12										
7/3/12										
7/4/12										
7/5/12										
7/6/12										
7/7/12										
7/8/12										
7/9/12										
7/10/12										
7/11/12										
7/12/12										
7/13/12										
7/14/12										
7/15/12										
7/16/12										
7/17/12	<0.1	12.4	1.94	<0.1	60.4	<0.003	0.393	0.061	<0.003	1.914
7/18/12										
7/19/12										
7/20/12										
7/21/12										
7/22/12										
7/23/12										
7/24/12										
7/25/12										
7/26/12										
7/27/12										
7/28/12										
7/29/12										
7/30/12										
7/31/12										
TOTAL										
MAX	<0.1	12.4	1.94	<0.1	60.4	<0.003	0.393	0.061	<0.003	1.914
MIN	<0.1	12.4	1.94	<0.1	60.4	<0.003	0.393	0.061	<0.003	1.914
AVG		12.4	1.94		60.4		0.393	0.061		1.914

7

Photograph by David Domingo (EPA) on September 11, 2012 looking at the total recoverable metals (effluent) worksheet for the month of July 2012.



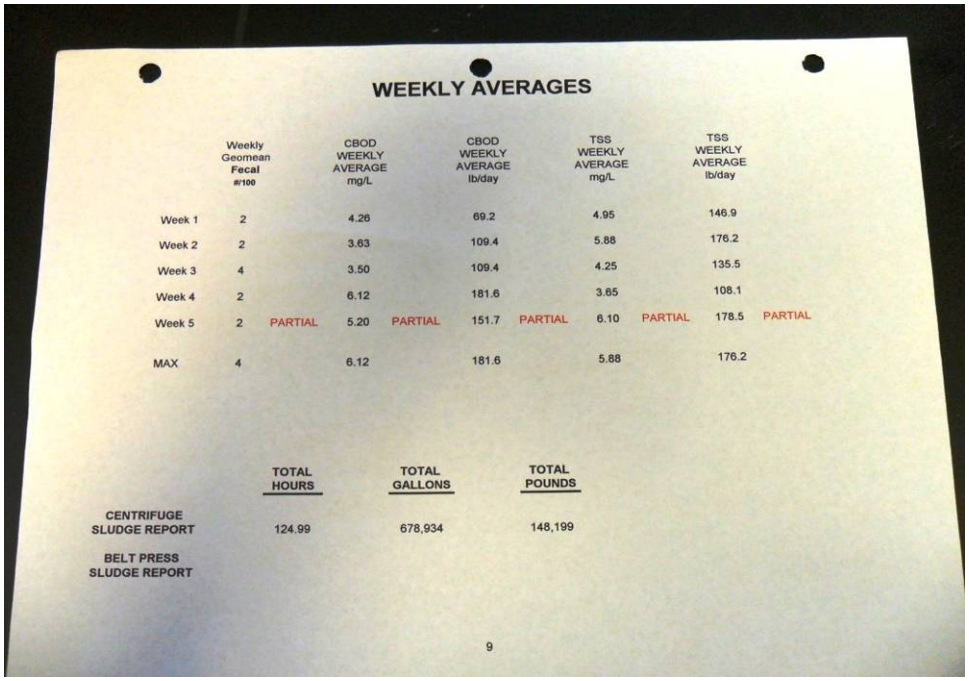
JULY 2012

WEATHER CONDITIONS / SPOKANE RIVER / GAS USAGE

DATE	HIGH TEMP °F	LOW TEMP °F	PRECIPITATION RAIN INCHES	PRECIPITATION SNOW INCHES	GENERAL CONDITIONS	POST FALLS DISCHARGE CFS	CHLORINE GAS USAGE	SULFUR DIOXIDE USAGE
7/1/12	75	56	0.03			7696	114	41
7/2/12	80	56	0.45			7343	121	43
7/3/12	67	46	0.18			7108	124	39
7/4/12	72	46				6727	124	40
7/5/12	78	51				5863	137	42
7/6/12	85	56				4659	131	40
7/7/12	91	56				4242	119	36
7/8/12	95	65				4050	120	37
7/9/12	89	65				3824	121	41
7/10/12	90	63				3580	121	36
7/11/12	91	63				3637	122	39
7/12/12	93	55	0.05			3778	122	40
7/13/12	89	54	0.03			3956	120	37
7/14/12	80	57	0.63			4174	115	40
7/15/12	76	49	0.89			4070	128	45
7/16/12	85	62	0.03			4147	113	44
7/17/12	83	63	0.10			4283	111	44
7/18/12	87	63				3580	112	44
7/19/12	90	68	0.06			3254	117	42
7/20/12	83	60	0.26			2908	124	44
7/21/12	80	57				2728	112	49
7/22/12	86	54				2733	106	46
7/23/12	71	53				2688	121	40
7/24/12	79	56				2348	123	46
7/25/12	83	57				1864	117	42
7/26/12	89	60				1396	133	42
7/27/12	87	63				1268	124	35
7/28/12	81	55				1275	114	39
7/29/12	84	56				1279	119	40
7/30/12	85	60				1277	121	41
7/31/12	84	56				1275	121	46
TOTAL			2.71			113010	3727	1280
MAX	95	68	0.89			7696	137	49
MIN	67	46				1268	106	35
AVG	83.5	57.5	0.09	#DIV/0!		3645	120	41.3

8

Photograph by David Domingo (EPA) on September 11, 2012 looking at the weather conditions, Spokane River and gas usage worksheet for the month of July 2012.



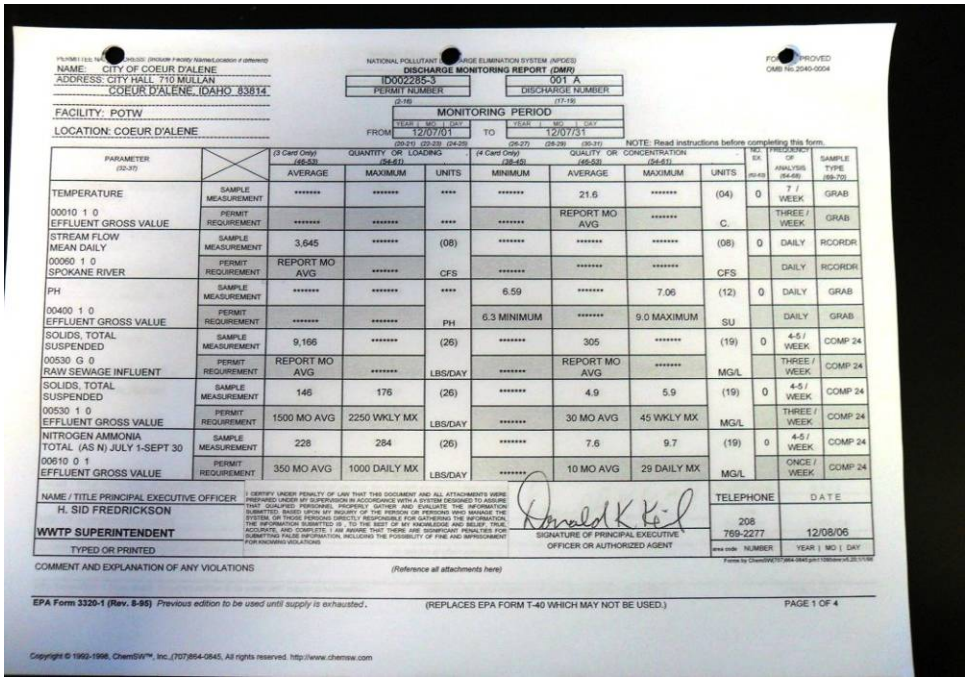
WEEKLY AVERAGES

	Weekly Geomean Fecal #/100		CBOD WEEKLY AVERAGE mg/L		CBOD WEEKLY AVERAGE lb/day		TSS WEEKLY AVERAGE mg/L		TSS WEEKLY AVERAGE lb/day	
Week 1	2		4.26		69.2		4.95		146.9	
Week 2	2		3.63		109.4		5.88		176.2	
Week 3	4		3.50		109.4		4.25		135.5	
Week 4	2		6.12		181.6		3.65		108.1	
Week 5	2	PARTIAL	5.20	PARTIAL	151.7	PARTIAL	6.10	PARTIAL	178.5	PARTIAL
MAX	4		6.12		181.6		5.88		176.2	

	TOTAL HOURS	TOTAL GALLONS	TOTAL POUNDS
CENTRIFUGE SLUDGE REPORT	124.99	678,934	148,199
BELT PRESS SLUDGE REPORT			

9

Photograph by David Domingo (EPA) on September 11, 2012 looking at the weekly averages worksheet for the month of July 2012. Note the last week in July is identified as a "partial" week.



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

FORM APPROVED OMB No. 2040-0004

NAME: CITY OF COEUR D'ALENE
ADDRESS: CITY HALL 710 MULLAN
COEUR D'ALENE, IDAHO 83814
FACILITY: POTW
LOCATION: COEUR D'ALENE

ID002285-3 (PERMIT NUMBER) (2-16)
001 A (DISCHARGE NUMBER) (17-19)

MONITORING PERIOD
FROM 12/07/01 (YEAR | MO | DAY) (20-21) (22-23) (24-25)
TO 12/07/31 (26-27) (28-29) (30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		QUANTITY OR LOADING (3 Card Only) (46-53) AVERAGE	QUANTITY OR LOADING (54-61) MAXIMUM	UNITS	QUALITY OR CONCENTRATION (4 Card Only) (38-45) MINIMUM	QUALITY OR CONCENTRATION (46-53) AVERAGE	QUALITY OR CONCENTRATION (54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
TEMPERATURE	SAMPLE MEASUREMENT	*******	*******	****	*******	21.6	*******	(04)	0	7 / WEEK	GRAB
00010 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*******	*******	****	*******	REPORT MO AVG	*******	C.		THREE / WEEK	GRAB
STREAM FLOW MEAN DAILY	SAMPLE MEASUREMENT	3.645	*******	(08)	*******	*******	*******	(08)	0	DAILY	RCORDR
00060 1 0 SPOKANE RIVER	PERMIT REQUIREMENT	REPORT MO AVG	*******	CFS	*******	*******	*******	CFS		DAILY	RCORDR
PH	SAMPLE MEASUREMENT	*******	*******	****	6.59	*******	7.06	(12)	0	DAILY	GRAB
00400 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*******	*******	PH	6.3 MINIMUM	*******	9.0 MAXIMUM	SU		DAILY	GRAB
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	9,166	*******	(26)	*******	305	*******	(19)	0	4-5 / WEEK	COMP 24
00530 G 0 RAW SEWAGE INFLUENT	PERMIT REQUIREMENT	REPORT MO AVG	*******	LBS/DAY	*******	REPORT MO AVG	*******	MG/L		THREE / WEEK	COMP 24
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	146	176	(26)	*******	4.9	5.9	(19)	0	4-5 / WEEK	COMP 24
00530 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	1500 MO AVG	2250 WKLY MX	LBS/DAY	*******	30 MO AVG	45 WKLY MX	MG/L		THREE / WEEK	COMP 24
NITROGEN AMMONIA TOTAL (AS N) JULY 1-SEPT 30	SAMPLE MEASUREMENT	228	284	(26)	*******	7.6	9.7	(19)	0	4-5 / WEEK	COMP 24
00610 0 1 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	350 MO AVG	1000 DAILY MX	LBS/DAY	*******	10 MO AVG	29 DAILY MX	MG/L		ONCE / WEEK	COMP 24

NAME / TITLE PRINCIPAL EXECUTIVE OFFICER
H. SID FREDRICKSON
WWTP SUPERINTENDENT
TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED UPON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

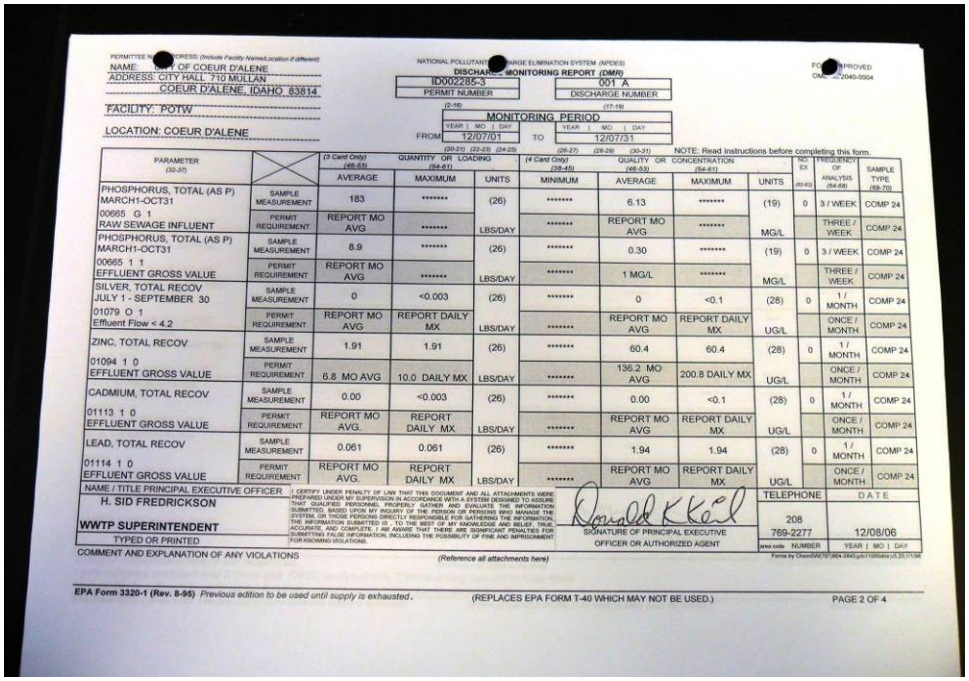
TELEPHONE: area code 208, NUMBER 769-2277

DATE: 12/08/06 (YEAR | MO | DAY)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

EPA Form 3320-1 (Rev. 8-95) Previous edition to be used until supply is exhausted. (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 1 OF 4

Photograph by David Domingo (EPA) on September 11, 2012 looking at the July 2012 DMR. Note the weekly average for CBOD, TSS and fecal coliform did not include all samples within the last calendar week of the month.



NAME: OF COEUR D'ALENE
ADDRESS: CITY HALL 710 MULLAN
COEUR D'ALENE, IDAHO 83814
FACILITY: POTW
LOCATION: COEUR D'ALENE

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)
ID002285-3 (PERMIT NUMBER) | 001 A (DISCHARGE NUMBER)
MONITORING PERIOD: FROM 12/07/01 TO 12/07/31

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
PHOSPHORUS, TOTAL (AS P) MARCH1-OCT31	SAMPLE MEASUREMENT	183	*******	(26)	*******	6.13	*******	(19)	0	3 / WEEK	COMP 24
00665 G 1 RAW SEWAGE INFLUENT	PERMIT REQUIREMENT	REPORT MO AVG	*******	LBS/DAY	*******	REPORT MO AVG	*******	MG/L		THREE / WEEK	COMP 24
PHOSPHORUS, TOTAL (AS P) MARCH1-OCT31	SAMPLE MEASUREMENT	8.9	*******	(26)	*******	0.30	*******	(19)	0	3 / WEEK	COMP 24
00665 1 1 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT MO AVG	*******	LBS/DAY	*******	1 MG/L	*******	MG/L		THREE / WEEK	COMP 24
SILVER, TOTAL RECOV JULY 1 - SEPTEMBER 30	SAMPLE MEASUREMENT	0	<0.003	(26)	*******	0	<0.1	(28)	0	1 / MONTH	COMP 24
01079 O 1 Effluent Flow < 4.2	PERMIT REQUIREMENT	REPORT MO AVG	REPORT DAILY MX	LBS/DAY	*******	REPORT MO AVG	REPORT DAILY MX	UG/L		ONCE / MONTH	COMP 24
ZINC, TOTAL RECOV	SAMPLE MEASUREMENT	1.91	1.91	(26)	*******	60.4	60.4	(28)	0	1 / MONTH	COMP 24
01094 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	6.8 MO AVG	10.0 DAILY MX	LBS/DAY	*******	136.2 MO AVG	200.8 DAILY MX	UG/L		ONCE / MONTH	COMP 24
CADMIUM, TOTAL RECOV	SAMPLE MEASUREMENT	0.00	<0.003	(26)	*******	0.00	<0.1	(28)	0	1 / MONTH	COMP 24
01113 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT MO AVG.	REPORT DAILY MX	LBS/DAY	*******	REPORT MO AVG	REPORT DAILY MX	UG/L		ONCE / MONTH	COMP 24
LEAD, TOTAL RECOV	SAMPLE MEASUREMENT	0.061	0.061	(26)	*******	1.94	1.94	(28)	0	1 / MONTH	COMP 24
01114 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT MO AVG.	REPORT DAILY MX	LBS/DAY	*******	REPORT MO AVG	REPORT DAILY MX	UG/L		ONCE / MONTH	COMP 24

NAME / TITLE PRINCIPAL EXECUTIVE OFFICER: H. SID FREDRICKSON, WWTP SUPERINTENDENT (TYPED OR PRINTED)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED UPON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

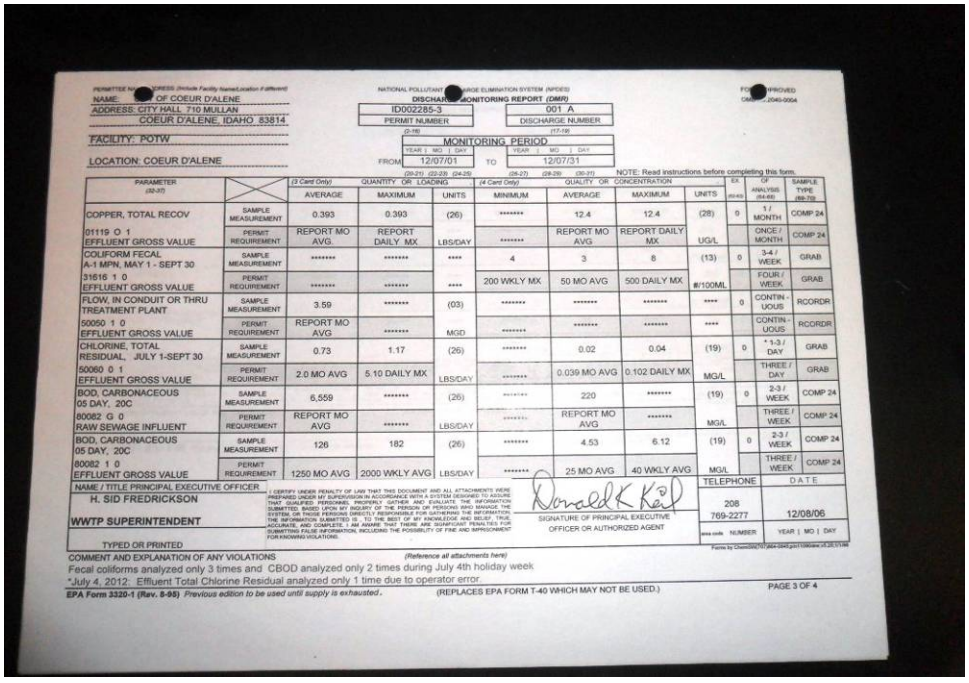
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: 208 769-2277 | DATE: 12/08/06

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

EPA Form 3320-1 (Rev. 8-95) Previous edition to be used until supply is exhausted. (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 2 OF 4

Photograph by David Domingo (EPA) on September 11, 2012 looking at the July 2012 DMR. Note the weekly average for CBOD, TSS and fecal coliform did not include all samples within the last calendar week of the month.



NAME: OF COEUR D'ALENE
ADDRESS: CITY HALL 710 MULLAN
COEUR D'ALENE, IDAHO 83814
FACILITY: POTW
LOCATION: COEUR D'ALENE

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)
ID002285-3 (PERMIT NUMBER) | 001 A (DISCHARGE NUMBER)
MONITORING PERIOD: FROM 12/07/01 TO 12/07/31

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
COPPER, TOTAL RECOV	SAMPLE MEASUREMENT	0.393	0.393	(26)	*******	12.4	12.4	(28)	0	1 / MONTH	COMP 24
01119 O 1 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT MO AVG.	REPORT DAILY MX	LBS/DAY	*******	REPORT MO AVG	REPORT DAILY MX	UG/L		ONCE / MONTH	COMP 24
COLIFORM FECAL A-1 MPN, MAY 1 - SEPT 30	SAMPLE MEASUREMENT	*******	*******	****	4	3	8	(13)	0	3-4 / WEEK	GRAB
31616 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*******	*******	****	200 WKLY MX	50 MO AVG	500 DAILY MX	#/100ML		FOUR / WEEK	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	3.59	*******	(03)	*******	*******	*******	****	0	CONTIN - UOUS	RCORDR
50050 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT MO AVG	*******	MGD	*******	*******	*******	****		CONTIN - UOUS	RCORDR
CHLORINE, TOTAL RESIDUAL, JULY 1-SEPT 30	SAMPLE MEASUREMENT	0.73	1.17	(26)	*******	0.02	0.04	(19)	0	* 1-3 / DAY	GRAB
50060 0 1 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	2.0 MO AVG	5.10 DAILY MX	LBS/DAY	*******	0.039 MO AVG	0.102 DAILY MX	MG/L		THREE / DAY	GRAB
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	6,559	*******	(26)	*******	220	*******	(19)	0	2-3 / WEEK	COMP 24
80082 G 0 RAW SEWAGE INFLUENT	PERMIT REQUIREMENT	REPORT MO AVG	*******	LBS/DAY	*******	REPORT MO AVG	*******	MG/L		THREE / WEEK	COMP 24
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	126	182	(26)	*******	4.53	6.12	(19)	0	2-3 / WEEK	COMP 24
80082 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	1250 MO AVG	2000 WKLY AVG	LBS/DAY	*******	25 MO AVG	40 WKLY AVG	MG/L		THREE / WEEK	COMP 24

NAME / TITLE PRINCIPAL EXECUTIVE OFFICER: H. SID FREDRICKSON, WWTP SUPERINTENDENT (TYPED OR PRINTED)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED UPON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

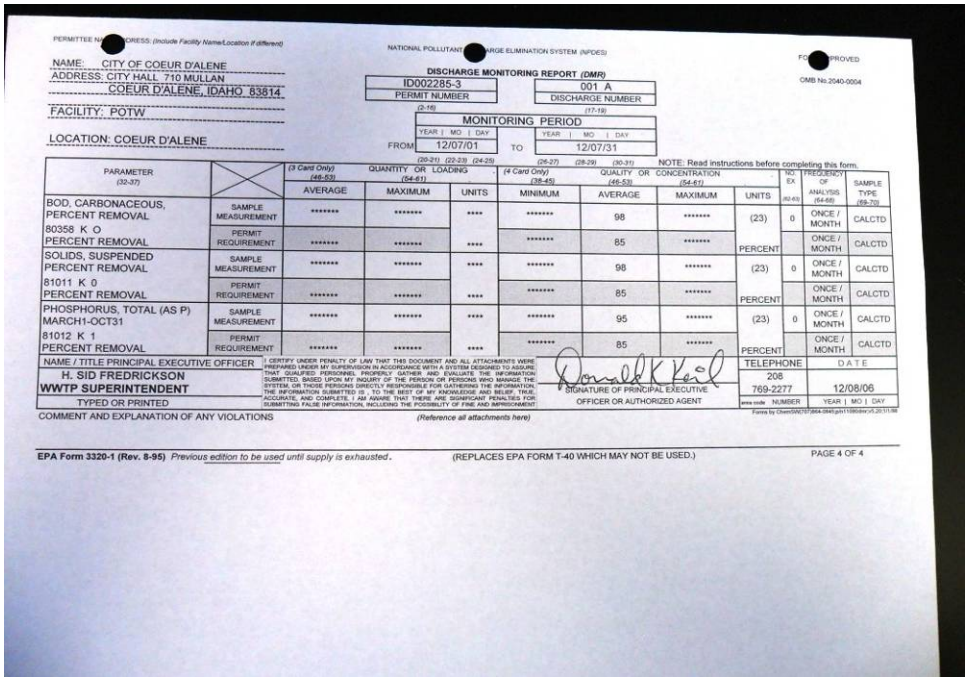
TELEPHONE: 208 769-2277 | DATE: 12/08/06

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Fecal coliforms analyzed only 3 times and CBOD analyzed only 2 times during July 4th holiday week
*July 4, 2012: Effluent Total Chlorine Residual analyzed only 1 time due to operator error

EPA Form 3320-1 (Rev. 8-95) Previous edition to be used until supply is exhausted. (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 3 OF 4

Photograph by David Domingo (EPA) on September 11, 2012 looking at the July 2012 DMR. Note the weekly average for CBOD, TSS and fecal coliform did not include all samples within the last calendar week of the month.



NAME: CITY OF COEUR D'ALENE
ADDRESS: CITY HALL 710 MULLAN
COEUR D'ALENE, IDAHO 83814
FACILITY: POTW
LOCATION: COEUR D'ALENE

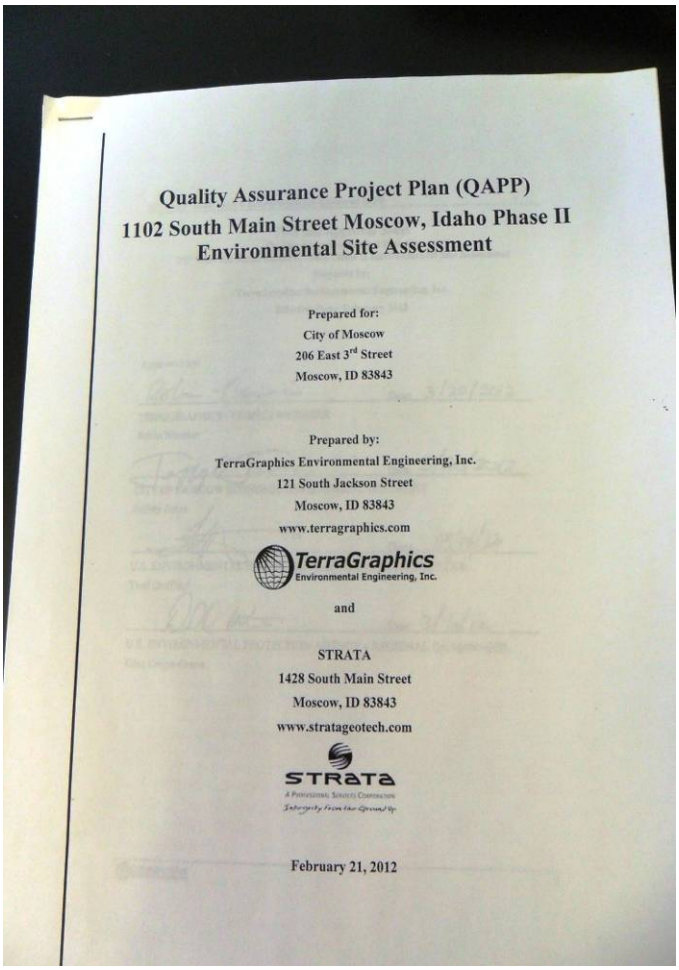
DISCHARGE MONITORING REPORT (DMR)
ID002285-3 (PERMIT NUMBER) | 001 A (DISCHARGE NUMBER)
MONITORING PERIOD: FROM 12/07/01 TO 12/07/31

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	QUANTITY OR LOADING UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	QUALITY OR CONCENTRATION UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
BOD, CARBONACEOUS, PERCENT REMOVAL 80358 K 0	SAMPLE MEASUREMENT	*******	*******	****	*******	98	*******	(23)	0	ONCE / MONTH	CALCTD
	PERMIT REQUIREMENT	*******	*******	****	*******	85	*******	PERCENT		ONCE / MONTH	CALCTD
SOLIDS, SUSPENDED PERCENT REMOVAL 81011 K 0	SAMPLE MEASUREMENT	*******	*******	****	*******	98	*******	(23)	0	ONCE / MONTH	CALCTD
	PERMIT REQUIREMENT	*******	*******	****	*******	85	*******	PERCENT		ONCE / MONTH	CALCTD
PHOSPHORUS, TOTAL (AS P) MARCH1-OCT31 81012 K 1 PERCENT REMOVAL	SAMPLE MEASUREMENT	*******	*******	****	*******	95	*******	(23)	0	ONCE / MONTH	CALCTD
	PERMIT REQUIREMENT	*******	*******	****	*******	85	*******	PERCENT		ONCE / MONTH	CALCTD

NAME / TITLE PRINCIPAL EXECUTIVE OFFICER: H. SID FREDRICKSON, WWTP SUPERINTENDENT (TYPED OR PRINTED)
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
TELEPHONE: 208 769-2277
DATE: 12/08/06
COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

EPA Form 3320-1 (Rev. 8-95) Previous edition to be used until supply is exhausted. (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) PAGE 4 OF 4

Photograph by David Domingo (EPA) on September 11, 2012 looking at the July 2012 DMR. Note the weekly average for CBOD, TSS and fecal coliform did not include all samples within the last calendar week of the month.



Quality Assurance Project Plan (QAPP)
1102 South Main Street Moscow, Idaho Phase II
Environmental Site Assessment

Prepared for:
City of Moscow
206 East 3rd Street
Moscow, ID 83843

Prepared by:
TerraGraphics Environmental Engineering, Inc.
121 South Jackson Street
Moscow, ID 83843
www.terragraphics.com

TerraGraphics Environmental Engineering, Inc.

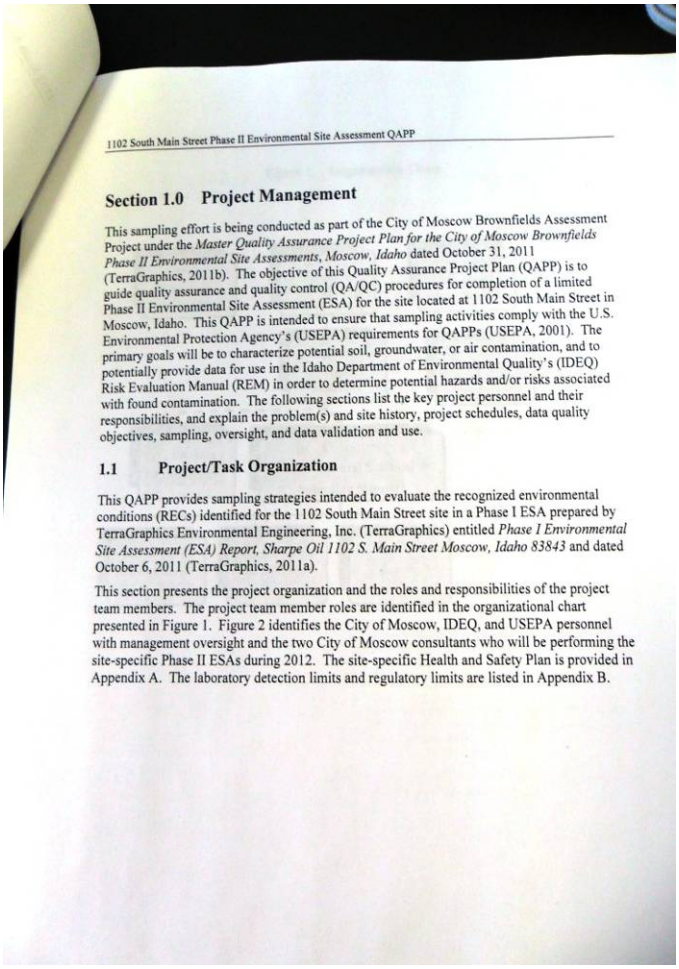
and

STRATA
1428 South Main Street
Moscow, ID 83843
www.stratageotech.com

STRATA
A Professional Services Corporation
Integrity from the Ground Up

February 21, 2012

Photograph by David Domingo (EPA) on September 11, 2012 looking at the QAP for the City of Moscow, ID Brownfields Phase II Environmental Site Assessment. The QAP does not address the City of Coeur d'Alene's wastewater treatment facility.



1102 South Main Street Phase II Environmental Site Assessment QAPP

Section 1.0 Project Management

This sampling effort is being conducted as part of the City of Moscow Brownfields Assessment Project under the *Master Quality Assurance Project Plan for the City of Moscow Brownfields Phase II Environmental Site Assessments, Moscow, Idaho* dated October 31, 2011 (TerraGraphics, 2011b). The objective of this Quality Assurance Project Plan (QAPP) is to guide quality assurance and quality control (QA/QC) procedures for completion of a limited Phase II Environmental Site Assessment (ESA) for the site located at 1102 South Main Street in Moscow, Idaho. This QAPP is intended to ensure that sampling activities comply with the U.S. Environmental Protection Agency's (USEPA) requirements for QAPPs (USEPA, 2001). The primary goals will be to characterize potential soil, groundwater, or air contamination, and to potentially provide data for use in the Idaho Department of Environmental Quality's (IDEQ) Risk Evaluation Manual (REM) in order to determine potential hazards and/or risks associated with found contamination. The following sections list the key project personnel and their responsibilities, and explain the problem(s) and site history, project schedules, data quality objectives, sampling, oversight, and data validation and use.

1.1 Project/Task Organization

This QAPP provides sampling strategies intended to evaluate the recognized environmental conditions (RECs) identified for the 1102 South Main Street site in a Phase I ESA prepared by TerraGraphics Environmental Engineering, Inc. (TerraGraphics) entitled *Phase I Environmental Site Assessment (ESA) Report, Sharpe Oil 1102 S. Main Street Moscow, Idaho 83843* and dated October 6, 2011 (TerraGraphics, 2011a).

This section presents the project organization and the roles and responsibilities of the project team members. The project team member roles are identified in the organizational chart presented in Figure 1. Figure 2 identifies the City of Moscow, IDEQ, and USEPA personnel with management oversight and the two City of Moscow consultants who will be performing the site-specific Phase II ESAs during 2012. The site-specific Health and Safety Plan is provided in Appendix A. The laboratory detection limits and regulatory limits are listed in Appendix B.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the QAP for the City of Moscow, ID Brownfields Phase II Environmental Site Assessment. The QAP does not address the City of Coeur d'Alene's wastewater treatment facility.

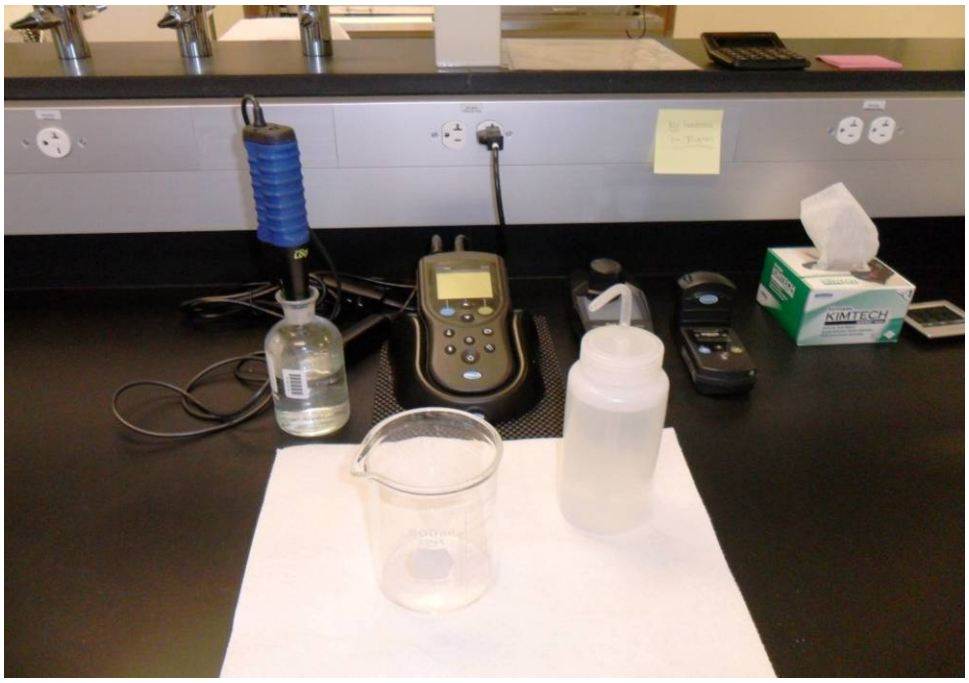
Photograph by David Domingo (EPA) on September 11, 2012 looking at the analytical equipment for nutrient analysis in the onsite laboratory.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the analytical equipment for chlorine analysis in the onsite laboratory.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the analytical balance in the onsite laboratory.

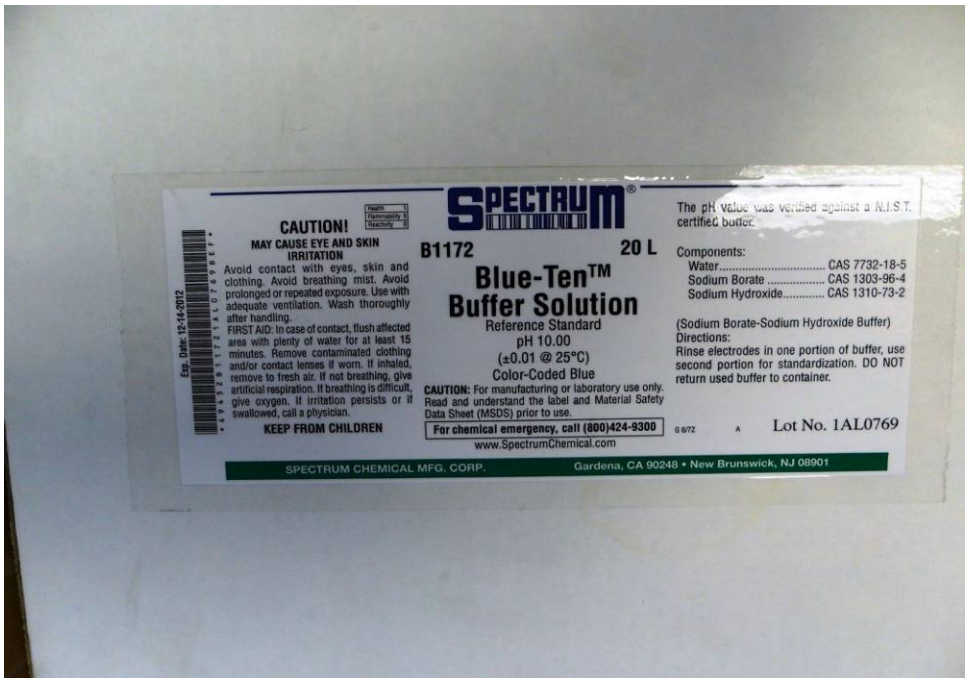
Photograph by David Domingo (EPA) on September 11, 2012 looking at the analytical balance in the onsite laboratory. Note the instrument was serviced and calibrated on October 5, 2011 by North West Instrument Services.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the pH meter in the onsite laboratory.



Photograph by David Domingo (EPA) on September 11, 2012 looking at the dissolved oxygen meter in the onsite laboratory.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the pH calibration buffers in the onsite laboratory. Note the dates on which the containers were received and opened are recorded on the boxes.

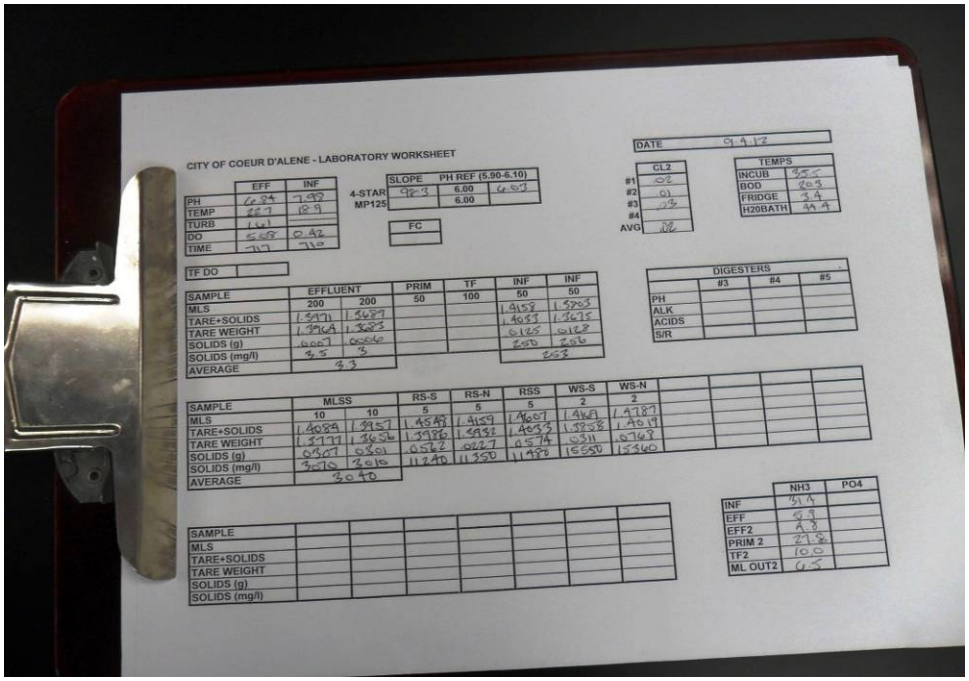


Photograph by David Domingo (EPA) on September 11, 2012 looking at 10.0 pH buffer solution. Note the expiration date is December 14, 2012.

Photograph by David Domingo (EPA) on September 11, 2012 looking at 4.0 pH buffer solution. Note the expiration date is August 31, 2013.

Photograph by David Domingo (EPA) on September 11, 2012 looking at 6.0 pH buffer solution. Note the expiration date is January 2014.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the refrigerator in the onsite laboratory.



Photograph by David Domingo (EPA) on September 11, 2012 looking at laboratory worksheet for September 4, 2012. Note the effluent and influent monitoring data (e.g. pH, temperature, dissolved oxygen…) are recorded. In addition, the temperatures of the incubator, water bath and refrigerator are recorded on the worksheet.

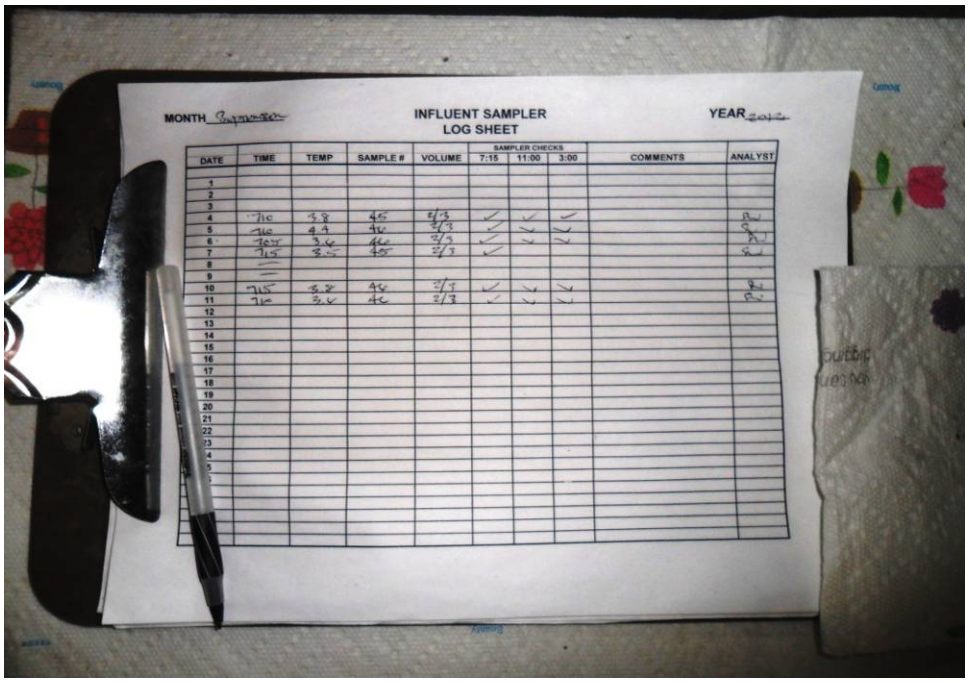
Photograph by David Domingo (EPA) on September 11, 2012 looking at the water bath in the onsite laboratory.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the incubator in the onsite laboratory.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the IDEXX Quanti-Tray equipment used for fecal coliform and E. coli analysis.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the screening units in the headworks at the Facility.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the influent composite sampler at the Facility.



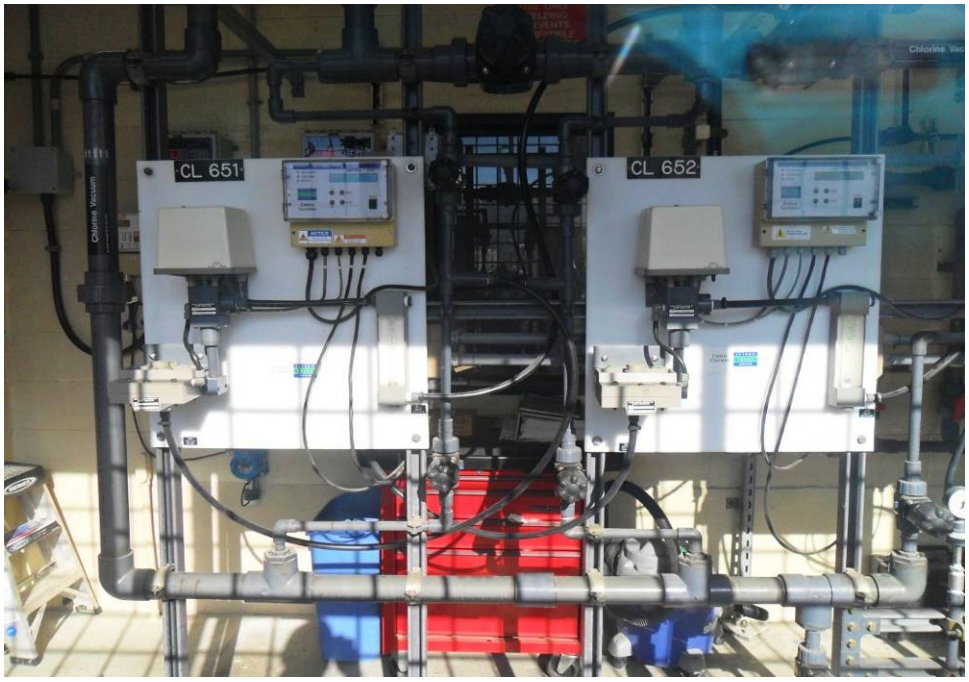
Photograph by David Domingo (EPA) on September 11, 2012 looking at the log sheet for the influent sampler. Note the temperature of the sampler is monitored and recorded along with the initials of the analyst in accordance with Parts IV.C and IV.F of the Permit.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the influent composite sampler at the Facility.

Photograph by David Domingo (EPA) on September 11, 2012 looking at one of the clarifiers (foreground) and trickling filters (background) at the Facility. Wastewater flows from the headworks to the primary clarifiers, the trickling filters, solids contact tank, final clarifiers and then to chlorine disinfection. Prior to discharge to the Spokane River, the effluent is dechlorinated with sulfur dioxide.

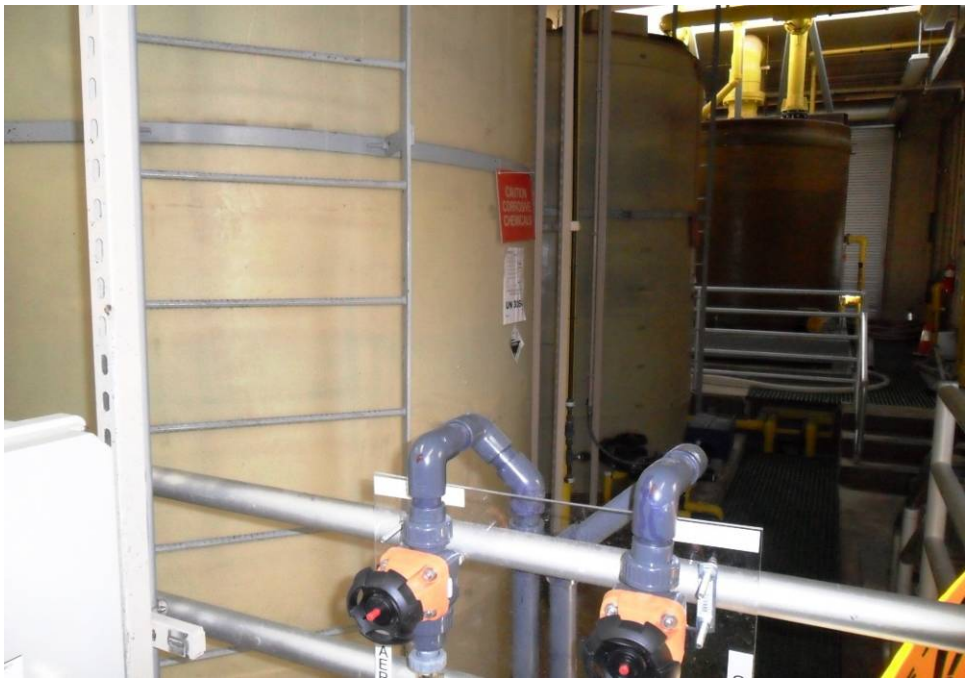
Photograph by David Domingo (EPA) on September 11, 2012 looking at the solids contact tank at the Facility.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the solids contact tank at the Facility.

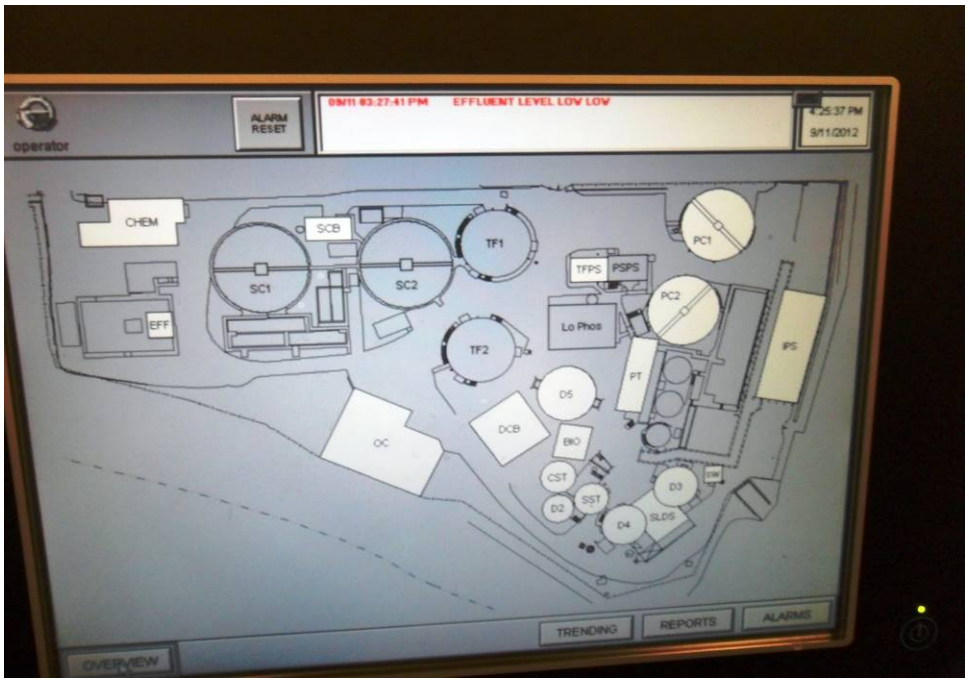


Photograph by David Domingo (EPA) on September 11, 2012 looking at the process control panels for chlorine injection.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the chlorine chemical storage building at the Facility.



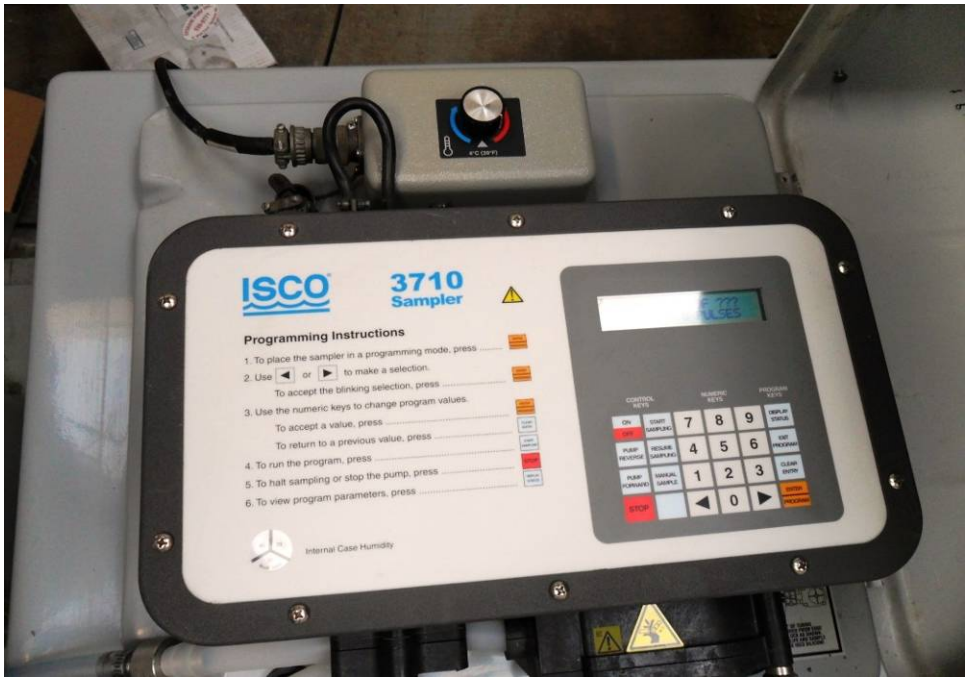
Photograph by David Domingo (EPA) on September 11, 2012 looking at chlorine liquid storage containers within the storage building.



Photograph by David Domingo (EPA) on September 11, 2012 looking at one of the monitors within the process control building.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the effluent composite sampler at the Facility.

Photograph by David Domingo (EPA) on September 11, 2012 looking at the log sheet for the effluent sampler. Note the temperature of the sampler is monitored and recorded along with the initials of the analyst in accordance with Parts IV.C and IV.F of the Permit.



Photograph by David Domingo (EPA) on September 11, 2012 looking at the effluent composite sampler.